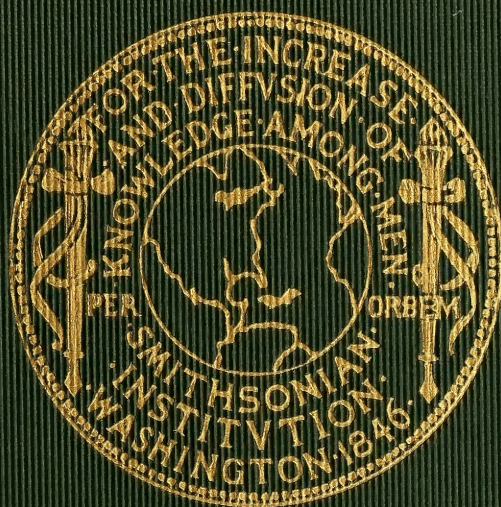


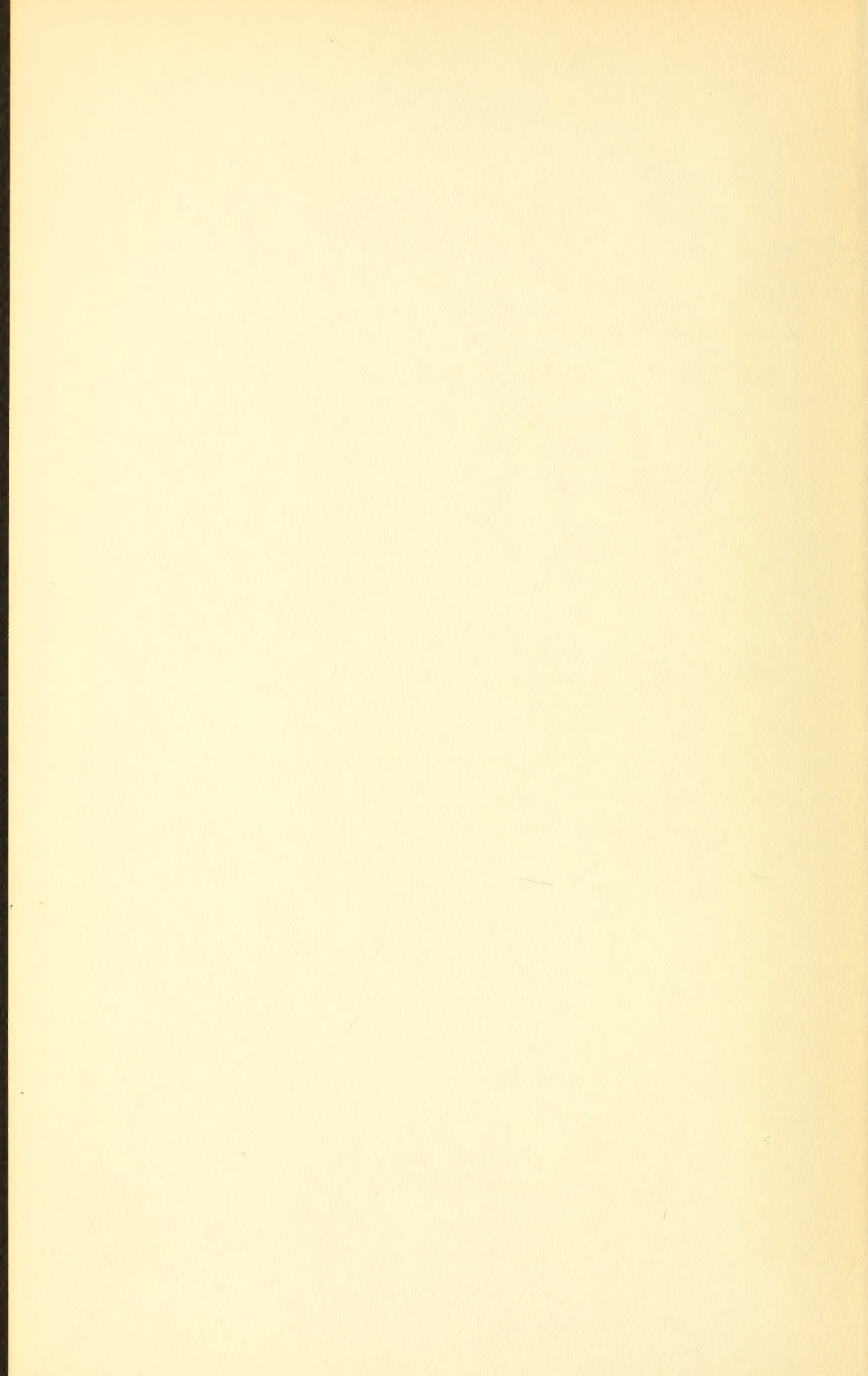
Q  
11  
U52Z  
CRLSSI













SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM

---

REPORT ON THE  
PROGRESS AND CONDITION OF THE  
UNITED STATES NATIONAL MUSEUM  
FOR THE YEAR ENDED JUNE 30, 1936



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1937

UNITED STATES NATIONAL MUSEUM,  
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,  
*Washington, D. C., October 15, 1936.*

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1936.

Very respectfully,

ALEXANDER WETMORE,  
*Assistant Secretary.*

Dr. CHARLES G. ABBOT,  
*Secretary, Smithsonian Institution.*

II



## CONTENTS

---

	Page
Operations for the year .....	1
Appropriations .....	1
Collections .....	3
Explorations and field work .....	4
Assistance from work relief agencies .....	7
Educational work .....	8
Visitors .....	9
Library .....	10
Publications .....	12
Photographic laboratory .....	13
Buildings and equipment .....	13
Meetings and special exhibits .....	14
Changes in organization and staff .....	15
Detailed reports on the collections .....	17
Department of anthropology .....	17
Department of biology .....	27
Department of geology .....	43
Department of arts and industries .....	53
Division of history .....	68
List of accessions .....	73
List of Museum publications .....	115





# REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1936

By ALEXANDER WETMORE

*Assistant Secretary of the Smithsonian Institution, in charge of the National  
Museum*

## OPERATIONS FOR THE YEAR

### APPROPRIATIONS

THE REGULAR funds for the maintenance and operation of the United States National Museum for the fiscal year ended June 30, 1936, were provided by appropriations carried in the Executive and Independent Offices Act approved February 2, 1935. Additional funds, for the purchase of the airplane *Winnie Mae* and for binding, from an appropriation to the Smithsonian Institution for printing and binding, were provided in the First Deficiency Appropriation Act, fiscal year 1936, approved June 22, 1936. Allotments for the National Museum are summarized as follows:

Preservation of collections-----	\$594, 578
Maintenance and operation-----	125, 672
Printing and binding (regular)-----	7, 992
Additional funds:	
For purchase of airplane <i>Winnie Mae</i> -----	25, 000
For binding-----	7, 500
<hr/>	
Total available for year-----	760, 742

The amount available for the Museum for 1936 was \$44,671 more than that for 1935. Of this sum the amount for salaries was \$24,685 more than for last year, this representing the final elimination of the pay cuts instituted under economy measures in the fiscal year 1933. The actual return under this pay restoration was greater than the sum indicated, as there were certain reductions in the regular salary rolls due to the transfer of salary funds amounting to \$815 to the Disbursing Office of the Treasury Department and to a decrease in personnel through the closing of the Museum's heating and lighting plant now that our heat is obtained from the Government Central Heating Plant and all electric power purchased.

The allotment for printing and binding was increased by \$9,108, most of this coming from a deficiency appropriation to the Smithsonian for printing and binding from which the Museum received



\$7,500. Printing for the year, unfortunately, had to remain at an absolute minimum, a condition that has been partially rectified for the fiscal year 1937. Interest in the contributions of the aviator Wiley Post to the progress of aviation, aroused by his tragic death in Alaska on August 15, 1935, brought a special appropriation of \$25,000 for the purchase of Post's plane, the *Winnie Mae*, as an addition to the Museum's aeronautical collections. Adjustments in the appropriation for maintenance and operation, as a result of our heat being furnished from the Government Central Heating Plant, have effected a saving of \$14,122.

The number of positions in the Museum and the amount available for miscellaneous expenditures were the same as for last year. Practically all departments of the Museum are undermanned, so that the work relating to the classification and arrangement of exhibits and specimens to make them fully accessible and useful is still greatly in arrears. This is particularly unfortunate since our principal responsibility to the public is the preservation for permanent use of the valuable collections in our care. Furthermore, the number of workers responsible for the maintenance of the Museum, especially the guard, labor, and char forces, are quite inadequate, and additional assistance is seriously needed in the curatorial and subprofessional groups concerned with the care of the collections. Under present conditions the proper guarding of the Museum buildings can be accomplished only by denying the guards full compensatory leave for Sunday and holiday service. Not only do they suffer in this regard, but unfortunately the public must be denied access to some of our exhibits for part of the week-end periods when the largest number of visitors are in the city.

Another year has passed without the salary promotions earned by many members of the staff. Although basic salaries have now been restored, following the economy pay cuts, it is of great importance that the Museum be fairly comparable with other Government departments in regard to promotions for efficient service. In the guard, labor, and char forces there has been an excessive turn-over of personnel because better opportunities are offered elsewhere. The scientific personnel has to a large extent been loyal in remaining, but unless some improvement in the situation can soon be made, it will be increasingly difficult to obtain and retain staff workers of the highest order, since they cannot be expected to ignore better opportunities elsewhere.

As in past years the char force was employed for only three hours a day in cleaning offices, laboratories, and exhibition halls. In comparatively recent years the number of the Museum's exhibition cases has doubled, and this has resulted in much more glass to clean; laboratories, too, have been filled to capacity with storage cabinets. Through



all this the daily work of cleaning has been doubled. To care for this increment the period of labor for the char force should be increased from three to five hours daily. Under present conditions the buildings cannot be kept properly clean.

Though there was a slightly increased allotment for printing and binding for the year, this was due entirely to the deficiency appropriation, and the added funds were allotted to binding books for the library. No additional funds were supplied for the printing requirements of the Museum, a matter of grave importance, since there was little more than enough for the printing of necessary forms and labels. The scientific publications of the Museum, therefore, suffered as in the preceding year. Manuscripts based on our collections, which contain information of great value to scientific workers throughout the country, are thus still unavailable for use. Though the situation regarding the binding of reference books and pamphlets remains serious, great improvement was made as a result of the funds allotted from the deficiency appropriation. Funds for binding, however, are an annual necessity, because bindings wear and periodicals and other publications that come in paper covers must be protected by permanent covers or they will be destroyed.

### COLLECTIONS

The material added to the Museum collections during the year had high value and maintained the great variety found normally among the annual accessions. The large part, as usual, came as gifts from the many persons interested in the National Museum. Expeditions financed mainly from the private income of the Smithsonian Institution added valuable and important series of specimens, particularly in the fields of archeology and biology. New material was received in 1,784 separate accessions, with a total of 486,581 specimens distributed among the five departments as follows: Anthropology, 4,856; biology, 263,705; geology, 213,024; arts and industries, 2,281; and history, 2,715.

For examination and report 1,519 lots of specimens were received, the majority being geological and botanical material. Part was returned by request to the senders, when it was not consumed during the process of identification and analysis, and part was retained for the collections as gifts.

Gifts of duplicates to schools and other educational institutions numbered 3,660 specimens, including material from all departments of the Museum. Exchanges of duplicate material with other institutions and individuals totaled 19,320 specimens, and 45 specimens were transferred to other Government agencies. Loans to workers outside of Washington aggregated 38,945 individual specimens.

Following is a summary of entries now covered in the Museum catalogs:

Anthropology-----	684,859
Biology-----	11,903,281
Geology-----	2,400,007
Arts and industries-----	124,715
History-----	497,325
Total-----	15,610,187

#### EXPLORATIONS AND FIELD WORK

Work in a number of interesting fields of exploration was carried forward during the year, mainly through grants from the income of the invested funds of the Smithsonian Institution.

At the request of the Society for Georgia Archeology, Frank M. Setzler, acting head curator of anthropology, investigated a large shell midden on St. Simon Island, Ga., during the last two weeks of February. In connection with excavations at the Glynn County airport, he spent several days making surface surveys on Sea, Sapelo, and Jekyll Islands, as well as on the mainland. Following this he made a rapid reconnaissance in the Chattahoochee Valley near Columbus, Ga.

Under the joint auspices of the National Geographic Society and the Smithsonian Institution, Henry B. Collins, Jr., assistant curator of ethnology, left Washington on May 21 for Cape Wales, Alaska, to conduct archeological investigations of the Eskimo. His previous work at Bering Strait, on St. Lawrence Island, and at Point Barrow has revealed the existence of an ancient but highly developed Eskimo culture—the old Bering Sea culture—and of intermediate stages between it and the modern type. It is hoped that the present expedition to this important area may discover additional stages in the early development of this group of primitive people.

The curator of ethnology, Herbert W. Krieger, spent brief periods in the study of aboriginal culture in tide-water Virginia and Maryland.

Dr. Aleš Hrdlička, curator of physical anthropology, spent June, July, and August 1935 on Kodiak Island, Alaska, excavating at the same site where he worked during previous seasons. Eight students aided him in the work: Tom Weber, Robert Heizer, Dr. George A. Seib, Josef A. Barton, Dr. E. H. Bell, Charles B. McKee, Hamilton Enslow, and Robert H. Merrill. The work yielded important additional information concerning the ancient men of the region. At the close of the fiscal year, Dr. Hrdlička was again at this site, accompanied by four students, with the definite intention of concluding the work there this season.



Under a cooperative arrangement with H. G. Deignan, stationed at Chiengmai, Siam, important biological work is being continued in that country to supplement previous investigations made by Dr. H. M. Smith. Mr. Deignan has forwarded a large shipment of birds and mammals, with further material on the way. He has been able to reach a number of localities from which specimens are particularly valuable.

For many years the National Museum has been in need of birds and mammals from regions in and adjacent to the Appalachian Mountain system. In mid-April, W. M. Perrygo, taxidermist, with Carleton Lingebach as assistant, began field work in West Virginia, continuing until the close of the fiscal year. It is planned to secure representative specimens from various sections of the State for use in tracing details of geographic distribution. Dr. Remington Kellogg, assistant curator of mammals, accompanied the party for two weeks in April to outline the work, and early in May Dr. Alexander Wetmore made a check on results being obtained in the field. The work is carried on through permits granted through the cooperation of the West Virginia Conservation Commission.

Dr. Wetmore, in the course of studies of the distribution of birds in Virginia, also made collections on White Top Mountain in the latter part of September and again early in June. He obtained material valuable in outlining the local ranges of certain birds. Early in October he carried on similar investigations on Spruce Knob and other mountains in West Virginia.

Dr. George S. Myers, assistant curator of fishes, accompanied by Stuart Abraham, of Alexandria, Va. (in connection with a survey of the fresh-water fishes of Virginia begun in 1933), made a trip to southeastern Virginia to collect fishes in Dismal Swamp and the Chowan-Roanoke River systems. Unexpected high water greatly hindered collecting, but a good series of fishes was obtained from Waqua Creek, tributary to the Chowan, and Wards Forks, tributary to the Roanoke.

Dr. Paul Bartsch, curator of mollusks, under a grant from the Smithsonian Institution, began some breeding experiments with the mollusk *Goniobasis virginica* of the Potomac drainage in order to ascertain the effect of different environmental conditions on animals from the upper and lower parts of the river. Nine cages to house living specimens were prepared, three of which were placed at Millville, W. Va., three at Roaches Run, Va., opposite Washington, D. C., and three at Belvoir, Va., below Alexandria. Dr. J. P. E. Morrison, senior scientific aid, on his own initiative made considerable collections of mollusks for the Museum in the Blue Ridge Mountains and the Shenandoah Valley.

Austin H. Clark, curator of echinoderms, continued work on a survey of the butterfly fauna of Virginia. He has now made a preliminary survey of 75 counties of the State and has gathered thousands of records. A number of species not heretofore known from the State have been found, some of much interest. P. W. Oman, of the Bureau of Entomology and Plant Quarantine staff, made extensive collections of Homoptera in Western United States, obtaining about 40,000 specimens, not a few of which represent species new to the Museum collections.

In February, Ellsworth P. Killip, associate curator of plants, was detailed for a fortnight's collecting on the Florida Keys. The results were highly satisfactory in adding much valuable material from this interesting locality to the herbarium.

Continuing his work of previous years, Prof. C. E. Burt, of Southwestern College, Winfield, Kans., was engaged in the field to obtain series of turtles and other herpetological material in southern Louisiana and the adjacent region of Texas. The expedition was eminently successful, about 850 amphibians and reptiles being secured, of which 794 were chelonians. These will throw much light on the variation and distribution of turtle species in south-central United States.

Dr. Richard E. Blackwelder, holder of the Walter Rathbone Bacon traveling scholarship of the Smithsonian Institution, visited many of the important islands of the West Indies in a study of the beetle family Staphylinidae. His reports from the field indicate that he has made collections that will be highly valuable to the Museum.

Mark C. Bandy spent four months in the Atacama Desert region of Chile in the interests of the Museum mineral collections. This project, financed in part by the Canfield fund, was undertaken in cooperation with the Mineralogical Museum of Harvard University. Collections were made at Chuquicamata, Copiapo, Calama, Coquimba, and other places, and much material was obtained both for exhibition and scientific purposes; there was based on this material an extensive study of the iron-sulphate group.

In May, E. P. Henderson, assistant curator of physical and chemical geology, left for Alaska to collect in an extensive limestone contact zone on Prince of Wales Island, a project that will extend into the next fiscal year. Preliminary reports from him indicate the probability of a very successful season.

Dr. Gustav A. Cooper, assistant curator of stratigraphic paleontology, made several brief field trips, in company with visiting scientists and members of Federal and State geological surveys. These included a visit to western Virginia, where a quantity of limestone blocks containing fossils so preserved as to permit etching was obtained. He visited also several quarries in the vicinity of Frederick,



Md., and productive areas near York and Lancaster, Pa., and Poughkeepsie, N. Y., to collect fossils and study the geology. He also accompanied Dr. George H. Chadwick to the Elks' Charles Bronx Memorial Park at Port Jervis, N. Y., to study new sections of Middle Devonian rocks exposed during extensive development of the park. Dr. Cooper's most extensive field trip came during the summer of 1935, when, accompanied by Prof. A. S. Warthin, of Vassar College, and Preston E. Cloud, he investigated many localities in Iowa, Michigan, Illinois, Indiana, New York, and Ontario and made extensive collections of Middle Devonian rocks. New and rare fossils, as well as a quantity of commoner material, resulted from this trip.

Dr. C. E. Resser, curator of stratigraphic paleontology, spent July and August in the southern Appalachians in researches on Cambrian geology, chiefly under a grant from the Geological Society of America. The results of this exploration are now being studied.

The field expedition for vertebrate fossils begun last year, under the direction of C. W. Gilmore, curator of vertebrate paleontology, extended well into the present year. Collections were made in the Two Medicine (Upper Cretaceous) formation of Montana and the Wasatch (Eocene) of the Big Horn Basin, Wyo., with good results. Several specimens of outstanding merit were procured, and the collections as a whole added much desired material to the study series.

Late in the year, Dr. C. Lewis Gazin, assistant curator of vertebrate paleontology, headed an expedition to the vertebrate-fossil fields of New Mexico and Arizona, the results of which cannot be reported until next year.

#### ASSISTANCE FROM WORK RELIEF AGENCIES

Personnel assigned to work at the Museum by the District of Columbia Government under the Federal Emergency Relief Administration was continued at the beginning of the year. This assistance included, as it did last year, work relating to the preservation and cataloging of the Museum collections and general work in the library. The project was closed on November 6, 1935.

On November 12, personnel was assigned from the Federal Art Project for the preparation of drawings, paintings, sketches, and plaster casts of various kinds. The work under this project, while reduced as to number of workers, was still in progress at the close of the fiscal year.

On May 18, a further project was initiated through the District of Columbia Government under the Works Progress Administration. The personnel under this was engaged largely in the same activities as those carried under the F. E. R. A.—making up an arrearage of

work in connection with the preservation of the national collections and in the arrangement of books and records. The work performed under the three projects is summarized in table 1.

As before, the curatorial staff of the Museum supervised and arranged the work. As a group the personnel assigned from the W. P. A. was efficient, in part owing to the character of the workers selected and in part to the excellent cooperation of the District of Columbia W. P. A. office.

TABLE 1.—*Summary of work performed by work relief agencies at the National Museum, fiscal year 1936*

DESCRIPTION OF WORK	MAN-HOURS			TOTAL
	F. E. R. A.	F. A. P.	W. P. A.	
Checking, labeling, and repairing library material.....	2, 753	-----	546	3, 299
Preparing drawings and photographs.....	283	2, 805	70	3, 158
Typing notes and records.....	3, 024	-----	787	3, 811
Performing miscellaneous work on specimens, including arranging, cataloging, checking, labeling, and numbering.....	10, 492	-----	2, 883	13, 375
Model making and repairing.....	522	-----	140	662
Preparing and mounting specimens.....	1, 245	-----	1, 924	3, 169
Labeling and drafting.....	30	-----	-----	30
Translating.....	-----	-----	210	210
Work on plaster casts.....	-----	858	-----	858
Total.....	18, 349	3, 663	6, 560	28, 572

#### EDUCATIONAL WORK

The National Museum during the year continued its customary activities in educational lines. Our exhibition halls display great series of objects so arranged as to demonstrate facts of many kinds, on subjects ranging from the tools and dress of primitive man to complicated modern machinery, examples of the life of strange lands, of the elements that compose the earth, fossil animals and plants of former ages, and many other things. Descriptive labels accompany all these, and there is constant change to keep them properly arranged and up to date. The whole serves as a compendium of reference to the student or as an attractive display to the one of more casual interest, from which all may profit according to their desires.

In addition, the Museum is constantly active in the dissemination of knowledge in response to many hundreds of inquiries that come by mail or from visitors. Classes from the city schools are guided through the halls, and groups of students from a distance are given



similar service. Although the Museum does not maintain regular series of lectures, members of the staff are called on frequently to address meetings. Students throughout the country interested in definite problems come to work with our collections and libraries, and frequently workers from abroad are engaged in investigations here that sometimes continue for months. From this it may be seen how widely varied is the range of our educational activities and how extensive the field that they cover.

## VISITORS

Visitors to the various Museum buildings showed an increase of 135,981 over last year. The total number for the year was 1,973,673—over 44,000 more than has ever before been recorded for a single year, the previous largest number being 1,929,625 in 1929–30. The average attendance for week days was 5,363 and for Sundays 6,294. The number of visitors to the Smithsonian Building on week days totaled 259,846 and on Sundays 53,050; to the Arts and Industries Building 715,763 on week days and 157,770 on Sundays; to the Natural History Building 519,074 on week days and 116,487 on Sundays; and to the Aircraft Building 151,683 on week days, closed on Sundays. Table 2 shows the number of visitors during each month for the year. The 312,031 visitors during August 1935 is the largest number ever recorded for a single month.

TABLE 2.—Visitors to the Museum buildings during the year ended June 30, 1936

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1935					
July-----	42, 590	102, 193	67, 875	18, 056	230, 714
August-----	49, 520	133, 252	90, 890	38, 369	312, 031
September-----	35, 686	94, 463	74, 580	13, 066	217, 795
October-----	18, 128	54, 203	45, 443	7, 738	125, 512
November-----	12, 576	40, 071	36, 362	6, 562	95, 571
December-----	9, 175	26, 083	23, 001	4, 269	62, 528
1936					
January-----	9, 749	25, 754	24, 096	3, 966	63, 565
February-----	9, 459	23, 875	23, 240	4, 089	60, 663
March-----	14, 424	40, 491	33, 981	6, 550	95, 446
April-----	40, 922	132, 603	86, 927	17, 842	278, 294
May-----	27, 203	85, 429	59, 510	12, 371	184, 513
June-----	43, 464	115, 116	69, 656	18, 805	247, 041
Total-----	312, 896	873, 533	<sup>1</sup> 635, 561	151, 683	1, 973, 673

Not including 3,614 persons attending meetings after 4:30 p. m.

## LIBRARY

The library of the National Museum increased its collections during the year by 1,669 volumes, 10,816 parts of volumes, and 966 pamphlets—a total of 13,451 publications, or 2,130 more than in 1935. Some of these additions were made to sets in the reserve section of the library—a section recently established to which substantial runs of important duplicate material may be assigned against future need. The library now numbers 90,046 volumes and 113,659 pamphlets. Of the accessions, 3,861—or 1,637 more than last year—were obtained by transfer from the Smithsonian duplicate collection or by special exchange correspondence. The number of new exchanges arranged for was 115. Exceptionally large sendings were received from a dozen or more learned societies and institutions, American and foreign.

As usual there were many gifts, both from members and associates of the scientific staff and from others. Two were outstanding—collections of great value built up over a period of years by two distinguished scientists long connected with the Museum. One was the working library of Dr. E. O. Ulrich on invertebrate paleontology, especially paleozoology, presented by Dr. Ulrich; the other that of the late A. N. Caudell on Orthoptera, presented by Mrs. Caudell. Each numbers thousands of items and has a complete card index. The Ulrich collection will continue to be kept in the division of invertebrate paleontology and the Caudell collection in the division of insects. The more important gifts also included 969 publications of a miscellaneous character from W. P. Hay, son of the late Dr. O. P. Hay; and 278 from the estate of the late Dr. W. L. Abbott, for years a generous benefactor of the Museum. Furthermore, the library was fortunate enough to acquire about 1,500 publications that had belonged to the late Dr. Walter Hough. These will remain in the department of anthropology as a permanent part of its working collection. Hundreds of the serials recently turned over to the Smithsonian library by the Bureau of the International Catalogue of Scientific Literature were forwarded to the Museum where they went far toward completing many of its files. Another valuable gift of the year was a set of printed cards from the Library of Congress covering the publications of the Smithsonian Institution and its branches to date, for use in the sectional libraries.

In the course of its regular work the library staff entered 10,955 periodicals, cataloged 2,677 volumes and pamphlets, and added 15,259 cards to the catalogs and shelf lists. They assigned 4,130 publications to the sectional libraries and loaned to the curators and their assistants 10,547, of which they borrowed 2,330 from the Library of Congress and 484 from other libraries. They returned 2,298 volumes to the Library of Congress and 469 to other libraries, and made



281 interlibrary loans—not a few to distant museums, universities, and public libraries. They filed in the main library 495 Wistar Institute cards and 3,972 Concilium Bibliographicum cards of the author set and distributed 3,520 of the systematic set of the latter to the sections concerned. They also undertook the revision of the Concilium Bibliographicum file, with a view to increasing the usefulness of this important library tool. They prepared 300 volumes for binding; examined and rearranged the material in three of the sectional libraries; began an inventory of the technological library; mounted 1,587 aeronautical clippings from the Bell collection and classified 632; withdrew from the main library 913 separates and reprints, grouped them according to subject, and sent them to the curators for their files; distributed among the sectional libraries 27,200 Library of Congress cards for the publications of the Smithsonian Institution and its bureaus; checked some of the current serials and notified the scientists of articles pertinent to their work—a service that was most welcome and that it is hoped can be extended to include all important journals received; and selected 603 maps not needed by the library and transferred them to the Smithsonian Deposit in the Library of Congress.

The sectional libraries continued to number 35, as follows:

Administration	Invertebrate paleontology
Administrative assistant's office	Mammals
Agricultural history	Marine invertebrates
Anthropology	Medicine
Archeology	Minerals
Biology	Mollusks
Birds	Organic chemistry
Botany	Paleobotany
Echinoderms	Photography
Editor's office	Physical anthropology
Engineering	Property clerk's office
Ethnology	Reptiles and amphibians
Fishes	Superintendent's office
Foods	Taxidermy
Geology	Textiles
Graphic arts	Vertebrate paleontology
History	Wood technology
Insects	

One change occurred in the permanent staff. Stephen Stuntz, who since 1929 had done excellent work as assistant messenger, resigned to accept a higher position in the office of the property clerk. He was succeeded by Carroll McKinley Martin, of Indiana. Two special assistants—Miss Wilda Suter, cataloger, and Mrs. Emma B. Thomsen, clerk-typist—were employed for a few months. Several workers were also assigned to the library for a number of weeks by the F.E.R.A. and later by the W.P.A.

One of the most urgent needs of the library was partly satisfied by an item in the deficiency bill that became law toward the close of the year appropriating to the Smithsonian Institution a sum for binding. The amount that it was possible to allot to the Museum library is not sufficient, however, to bring its binding up to date. There is need also for a greatly increased sum for the purchase of books and periodicals requested by the curators, for while it is possible to get by exchange or loan much of the material required by them, there are many books and serials, some very expensive, that are indispensable to their research work and obtainable only by purchase. During the year the funds available for such publications were exhausted in January, with the result that dozens of requests for important items had to be held over until July. The library should be in position at all times to supply promptly to the scientists of the Museum the literature, wherever and however published, that is essential to the studies they have immediately in hand or in prospect.

#### PUBLICATIONS

For the year there was available \$4,050 for printing the Annual Report, Bulletins, and Proceedings of the National Museum. This was an increase of about \$2,650 over the previous year, an increase reflected in a greater output of publications. Thirteen publications were issued—the Annual Report, 11 Proceedings papers, and one number of the Contributions from the National Herbarium. These are listed at the end of this report. Ten Proceedings papers in press at the end of the year also were chargeable to the 1936 allotment.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 22,831 copies; while in addition 11,105 copies of publications issued during this and previous years were supplied in response to special requests.

During the year 459,149 forms, labels, and other items were printed; no volumes were bound.

*Index of Museum publications.*—The compilation of the comprehensive index to Museum publications has now been in progress three years, and a sizable start has been made in this long task. The editor, Paul H. Oehser, and his assistant, Miss Gladys Visel, have spent as much time on the index as the other work of the editorial office permitted, with the result that four Bulletins and one volume of Proceedings were indexed during the year. Indexing is now complete through Bulletin 47, part 2, and Proceedings volume 17. The filing of the index cards is now virtually up to date. One F. E. R. A. worker helped in the filing from July 1 until November 6. Approximately 68,500 cards were added to the index during the year, making a total of about 183,500.



It is tentatively planned to try to complete for publication at least a part of the index by 1946, the Smithsonian Institution Centenary. In its current form the index is available to the curators and others who may have occasion to consult it.

#### PHOTOGRAPHIC LABORATORY

The photographic laboratory during the year made 3,179 negatives, 14,468 prints, 980 lantern slides, 287 enlargements, and 9 transparencies; developed 73 rolls, 25 film packs, and 2 cut films; and mounted 32 prints. This work includes, in addition to that done for the Smithsonian Institution proper and the National Museum, photographic needs supplied through a cooperative arrangement to the Bureau of American Ethnology and the National Gallery of Art.

Two new color-print processes were introduced during the year, making it possible to produce photographs in color from sets of two or three color separation negatives.

F. D. Kestner was appointed junior photographer in the laboratory on September 3, 1935, filling the position made vacant by the retirement on June 30, 1935, of Mrs. Amelia Turner, underphotographer, after 17½ years of service.

#### BUILDINGS AND EQUIPMENT

*Repairs and alterations.*—Among repairs to Museum buildings and equipment during the year, besides the usual repainting and minor alterations, may be mentioned the following:

Removal of two old steam boilers from the basement of the southwest pavilion of the Arts and Industries Building, making this space available for other purposes.

Rewiring east end of Smithsonian Building, partly completed at end of year.

Remodeling and reconditioning rooms occupied by division of graphic arts in west range of Smithsonian Building.

Repairing and repainting exterior of Aircraft Building.

Clearing out basement of northwest portion of Arts and Industries Building of cuts of old Museum publications stored there, making this space available for storage.

*Heat, light, and power.*—For heating the Museum group of buildings, 62,827,000 pounds of steam, furnished by the Government Central Heating Plant, were used, 3,426,000 pounds more than last year. The electric current used amounted to 1,341,400 kilowatt-hours, an increase of 96,440 over the previous year.

*Ice production.*—The refrigerating machine, for manufacturing ice for the Museum buildings, was operated 3,936 hours during the year, producing 408.6 tons of ice at \$1.58 a ton, a little more than the rate last year.

*Fire protection.*—Notable progress was made during the year in eliminating fire hazards and improving fire-protection equipment in various parts of the Museum buildings. The most important work along these lines is the rewiring of the east end of the Smithsonian Building, in progress at the end of the year. This rewiring has long been urgent, and when completed will eliminate a fire hazard that has been impending in that part of the building where the Smithsonian administrative offices are located and also where stocks of Smithsonian publications are stored.

As a further protection, 31 new fire extinguishers were installed throughout the various buildings; and some of the old extinguishers were located more accessibly. All the fire-protection apparatus was given its periodic testing and inspection.

*Furniture and fixtures.*—The furniture added during the year included 34 exhibition cases; 520 pieces of storage, office, and laboratory furniture; and 1,483 drawers. Equipment condemned and disposed of consisted of 56 exhibition cases and bases, 134 pieces of storage, office, and laboratory furniture; 764 drawers and frames. An inventory of furniture on hand on June 30, 1936, showed 3,743 exhibition cases; 18,143 pieces of storage, office, and laboratory furniture; and 108,577 drawers, boxes, and frames of various kinds.

#### MEETINGS AND SPECIAL EXHIBITS

Scientific, educational, and welfare organizations are granted the use of the auditorium and lecture room in the Natural History Building for regular and special meetings, and whenever possible the Museum assists in carrying out their programs. During the year 141 such meetings were held. Noteworthy were lectures by Dr. Charles Armstrong on "Diseases of Animals"; Dr. Aleš Hrdlička on "Results of the Most Recent Anthropological Explorations in Alaska"; Dr. F. J. Jordan on "Photographic Equipment"; Dr. Earl S. Johnston on "Sun Rays and Plant Life"; Dr. N. H. Heck on "Earthquakes"; and Dr. V. K. Zworykin and Dr. W. L. Barrow on "Wave Lengths and Television."

*Special exhibits.*—The foyer of the Natural History Building was used almost continuously during the year for a series of 15 special exhibits under the auspices of various educational, scientific, and Governmental agencies, as follows:

July 1 to 31, 1935: Fourth annual exhibit of the Association of Federal Architects.

August 2 to 10, 1935: Exhibition of model coaches submitted in a competition held by the Fisher Body Craftsman's Guild.

August 4 to September 14, 1935: Stamp exhibit sponsored by the Washington Philatelic Society.

September 19 to October 7, 1935: Exhibition of prints comprising a part of the collection presented to the National Gallery of Art by the Chicago Society of Etchers.



- November 16 to 30, 1935: Exhibition of commercial and portrait photography by the Professional Photographers' Association of Washington.
- December 1 to 31, 1935: Exhibition of Peruvian art under the auspices of the Center of Inter-American Studies, George Washington University.
- January 6 to 30, 1936: Early American textiles exhibit, specimens from the National Museum's division of textiles.
- February 1 to March 13, 1936: Exhibit of oil portraits by Bjorn Egeli.
- February 3 to 29, 1936: Exhibition of lithographs, etchings, block prints in color, pastels, water colors, and drawings by Mons Breidvick.
- March 5 to 12, 1936: Exhibit under the auspices of the District of Columbia Dental Society in connection with the Five States Post Graduate Dental Clinic.
- March 13 to 31, 1936: Exhibit of art work by white children of elementary public schools of the District of Columbia.
- April 1 to 30, 1936: First Annual Metropolitan State Art Contest exhibit, under the auspices of the District of Columbia Federation of Women's Clubs.
- May 1 to 31, 1936: Fifth annual architectural exhibit of the Association of Federal Architects.
- June 1 to 30, 1936: Art work exhibit under the direction of the District of Columbia Art Project of the Works Progress Administration.

#### CHANGES IN ORGANIZATION AND STAFF

The only change in the organization of the Museum came through a reorganization on July 1, 1935, of the fiscal offices of the Smithsonian Institution by which all its fiscal work was coordinated under the direct supervision of N. W. Dorsey, accountant and auditor. All fiscal matters pertaining to Museum appropriations are now handled through Thomas F. Clark, assistant accountant and auditor.

The year was marked particularly by the loss of several high officials long associated with the National Museum. Loss through death included three active workers and four honorary staff members, as follows: Dr. Walter Hough, head curator of anthropology, who died on September 20, 1935, after almost 50 years of service; William Alexander Knowles, property clerk, who died on July 29, 1935, after 43 years of service; and August Flegel, guard, on February 28, 1936, with 10 years of service; and from the honorary staff, Dr. Albert Spear Hitchcock, custodian of grasses since October 10, 1912, who died on December 16, 1935; Andrew Nelson Caudell, custodian of Orthoptera since December 19, 1905, who died on March 1, 1936; Dr. William Louis Abbott, associate in zoology since March 25, 1905, who died on April 2, 1936; and Dr. August Frederick Foerste, associate in paleontology since September 1932, who died on April 23, 1936.

Ten Museum employees were transferred from active service to the retired list for age or disability, as follows: Earl V. Shannon, assistant curator of physical and chemical geology, on July 31, 1935, through disability (on furlough since July 9, 1929); James S. Gold-

smith, superintendent of buildings and labor, through age, on October 31, 1935, after nearly 53 years of service; George H. Sherwood, assistant engineer, through age, and William J. Sammond, assistant engineer, through disability, on August 31, 1935, and May 31, 1936, respectively; John M. Barrett, junior scientific aid, through age, on February 29, 1936, after 45½ years of service; Harry G. Lugenbeel, sergeant of the Freer Gallery guard force, through disability, on October 12, 1935, after nearly 42 years of service; John Hammerstrom, guard, through age, and Thomas N. Stanford, guard, through disability, on September 30 and November 29, 1935, respectively; and Mrs. Maria Ezell and Mrs. Maggie Johnson, of the char force, for disability.

Frank M. Setzler, assistant curator of archeology, was advanced to the position of curator of anthropology on December 16, 1935, and designated to act in charge of the department of anthropology as acting head curator.

Paul S. Conger, of the Carnegie Institution of Washington, long associated with the late Dr. Albert Mann, was given an honorary appointment as custodian of diatoms, effective February 16, 1936.

Royal H. Trembly, assistant superintendent of buildings and labor, was advanced on November 16, 1935, to succeed J. S. Goldsmith as superintendent, and on February 16, 1936, Charles C. Sinclair, senior mechanic, was promoted to be assistant superintendent of buildings and labor.

Lawrence L. Oliver, clerk in the property office, was advanced on August 1, 1935, to the position of assistant property clerk, and on October 1, 1935, he was made property clerk, succeeding the late W. A. Knowles. Stephen C. Stuntz, on November 1, was transferred from the Smithsonian library to be assistant property clerk.

Floyd B. Kestner was appointed junior photographer on September 3, 1935, for service in the photographic laboratory.

William E. Wade, under mechanic, was promoted on September 1, 1935, to succeed George H. Sherwood as assistant engineer.

Joseph H. Boswell, guard on the roll of the National Gallery of Art, was transferred to the Museum on December 9, 1935, as principal guard, to succeed H. G. Lugenbeel, in charge of the Freer Gallery guard force.

Carl W. Mitman, head curator of arts and industries, was designated as Smithsonian contact officer in connection with the Institution's exhibit at the Texas Centennial Exposition at Dallas June 6 to November 30, 1936. Norman H. Boss, chief preparator in vertebrate paleontology, was detailed on May 1, 1936, as exhibits supervisor to assist in the preparation and maintenance of the exhibit.



## DETAILED REPORTS ON THE COLLECTIONS

### DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Acting Head Curator*)

On September 20, 1935, the Museum suffered an irreparable loss in the death of Dr. Walter Hough, who for 49 years had been directly connected with the work of the Smithsonian Institution and the National Museum. Dr. Hough was appointed copyist in the division of ethnology in January 1886. His status was changed to aid in 1887, assistant curator in 1894, and curator in 1910. In March 1923 he became head curator of the department of anthropology and served in that capacity until his death. As curator of the division of ethnology and as an archeologist in the general field of the Southwest, he added greatly to our collections and supervised the handling and systematizing of a vast number of anthropological specimens. Dr. Hough's genial personality, his exceptional kindness and sympathetic attitude toward staff and visitors, together with his encyclopedic mind, won for him the fullest cooperation, respect, and admiration of all. Within the Museum he will be remembered especially for his broad anthropological knowledge and his stimulating direction.

During July and August the curator of physical anthropology was engaged in field work on Kodiak Island, Alaska, which was renewed again in June 1936. Through a cooperative project with the National Geographic Society, archeological exploration was inaugurated at Cape Wales, Alaska, to continue during the season of 1936. Further, a brief survey was made among the islands of Georgia and the Chattahoochee Valley near Columbus, Ga., and surface sites were investigated in tide-water Virginia.

### ACCESSIONS

*Ethnology.*—The division of ethnology proper received 57 accessions amounting to 3,134 specimens, as compared with 579 specimens during the previous fiscal year. Among them are two of outstanding merit: The large Richard K. Peck collection of weapons, articles of personal adornment, costumes, and miscellaneous objects illustrating the decorative arts of the Negritos and Papuans of Dutch New Guinea and of the Dyaks of Borneo, deposited by Mrs. C. A. Kleinoscheg; and specimens illustrating the material culture in the daily life of the Jivaro Indians from eastern Ecuador, received as a gift from W. A. Larner, Jr.

Other important accessions, arranged according to geographical areas, include a collection of beaded and quilled objects of personal adornment and other miscellaneous items assembled by Mrs. Edna Olney Larimer on the Sioux Reservation in South Dakota more than 50 years ago, received as a gift from Cassius S. Larimer. A cloth bag with embroidered floral designs in small porcelain and glass beads, typical of early decorative work of eastern Indians in those materials, a necklace of shell and turquoise beads from the Hopi of Arizona, and a blanket woven in pictorial style by the Navaho Indians came as gifts from Mrs. Charles D. Walcott. By transfer from the Bureau of American Ethnology there was received a collection of reproductions of "sand paintings" and other paintings of the Navaho Indians of the Southwest, painted by Hostin Claw, a Navaho Indian artist, and obtained through the friendly interest of Mrs. Walcott. A collection of ethnological material from the Indian tribes of northern Oregon and southern Washington was made for the Museum by the curator, H. W. Krieger, under a P. W. A. grant for salvaging materials that would have been destroyed or made inaccessible at the completion of the Bonneville Dam. The collection is of particular interest in connection with studies involving early trade relations of the Hudson's Bay Co., Astor's Northwest Trading Co., and early French and Russian trade influences in the Columbia River Valley. Native costumes were obtained by Dr. Truman Michelson, of the Bureau of American Ethnology, while engaged in linguistic studies in the Hudson Bay region.

President Franklin D. Roosevelt presented a collection of costumes, musical instruments, and weapons from the Cuna and Tule Indians of southeastern Panama. C. Spencer deposited a collection of primitive medicine from the Jivaro Indians in the Arajuno River district, Ecuador, including vines used by the Indians in preparing narcotic drinks, roots for poisoning fish, roots used in curing toothache and throat infections, and leaves used in brewing tea as a cure for rheumatism.

Africa was represented by two accessions. Dr. Hans Himmelheber presented four examples of West African Negro art from the Baoulé villages on the Ivory Coast, and Miss Josephine A. Rohrer contributed an example of a wood carving from the Zulus of South Africa.

Artifacts from Australian tribes, such as weapons, message sticks, weavings, and stone implements, were received as a gift from the late Dr. Elwood Mead, through Mrs. Mead. A miscellaneous collection of Melanesian weapons, primarily Fijian, was presented by Miss Marion L. Oliver.

Several accessions originating in China and Japan were received. A Japanese costumed doll presented by Tsuyoko Nakamura was lent



by Mrs. Franklin D. Roosevelt. Dr. Hugh M. Smith presented a series of paintings of Japanese subjects on silk cloth, which were collected by him while in Japan in 1903. Two beautiful silk fans from China with carved ivory staves—one of the most artistic of the accessions received during the year—came as a gift from Mrs. Charles L. McCawley, through Mrs. George Cabot Lodge.

A noteworthy gift of the year is the lighting collection of the late Virgil M. Hillyer, presented by Mrs. Virginia W. Hillyer. This collection of 1,200 items is comprehensive, including objects illustrating the history of lighting from ancient to comparatively recent times. It is especially rich in fifteenth, sixteenth, and seventeenth century objects. An endowment of \$7,000 to the Smithsonian Institution accompanied this gift.

Russian, Italian, and English period jewelry was bequeathed by Mrs. Martha L. Loomis. An Icelandic spoon box dating from 1685 was lent by the Misses Ruth and Rosemary Frost. Thirty-three etchings on ivory and whalebone were presented by Frederic A. Delano, comprising one of the best collections of scrimshaw work in existence. An old Spanish halberd head, possibly a relic of Coronado's expedition, found in Barber County, Kans., was presented by J. G. Braecklein. A large number of objects representing the arts and crafts of Colonial America collected by the late Dr. Walter Hough were presented by Mrs. Myrtle Z. Hough.

In the section of musical instruments four accessions, comprising 215 specimens, were received, in contrast with three specimens last year. The outstanding items include a fife used in the Revolutionary War and an old English wooden flute, presented by Merle R. Wyman; an old type of Edison phonograph complete with recording instrument and a large number of wax cylinder records and a good example of a Swiss music box, donated by Mrs. J. T. Pleitner; and an old English pitchpipe formerly used in the Church of St. Mary's, Dedham, England, given by C. D. Sherman, of Essex, England.

In the section of ceramics there were nine accessions, totaling 26 specimens, compared with 12 specimens last year. Among the additions are examples of Worcester ware, the gift of Mrs. C. C. Andrews; Bristol glass, the gift of Miss Mary F. McMullen; a German lustre pitcher, acquired by purchase; a collection of Haviland china, the bequest of Mrs. William Vaux Ewers; a large Sevres ormolu vase bearing the factory year mark of 1764, the gift of Mrs. Frederic L. Chapin; a Hispano-Moresque pitcher from Tunis, lent by Miss Katherine Dougal; and an old English molasses jug and a Stiegel blue-glass salt dish, the gift of Norman F. Jones. Worthy of special mention also is the gift by S. I. Ballard of an enameled glass pitcher

made in pre-Revolutionary days by William Henry Stiegel at Manheim, Pa.

In the section of period art and textiles nine accessions, totaling 24 specimens, were received, which compare favorably with the nine specimens of last year. Among the additions were Venetian furniture, Venetian point, Chantilly and Hungarian point laces, carved ivory and painted silk fans, and miscellaneous textiles. A collection of period jewelry from Italy, England, and Germany came as a gift from Mrs. Francis T. Redwood. Of particular interest also is a wax costumed doll representing H. R. H. Princess Elizabeth of York, the gift of Mrs. Hugh Reid Griffin.

*Archeology.*—The division of archeology received 43 accessions, totaling 951 specimens, as compared with 2,412 specimens for the previous year. Four of these (566 specimens) were derived from the Old World. The following may be regarded as noteworthy: 557 Paleolithic artifacts from Mugharet et-Tabun (Cave of the Oven) on the western slope of Mount Carmel, near Athlit, Palestine, collected by the British School of Archaeology in Palestine and the American School of Prehistoric Research, received as a deposit from the Archaeological Society of Washington; a carved ivory specimen, beautifully incised in Old Bering Sea style, from the Diomed Islands, Bering Strait, Alaska, presented by Mrs. Charles D. Walcott; 46 earthenware vessels, stone implements, and shell beads from Moundville, Tuscaloosa County, Ala., given by the Alabama Museum of Natural History; 75 artifacts from Kanaga, Aleutian Islands, Alaska, given by A. T. La Pointe; 33 earthenware vessels and stone artifacts, mostly from Costa Rica, collected in 1891 and presented by Brig. Gen. George P. Scriven; and a stone collar and 11 other artifacts from a cave near Cape Rojo, Puerto Rico, given by W. E. Parker. A large and important accession mentioned in last year's report but not cataloged until this year contained 1,116 archeological specimens from a village site on Uyak Bay, Kodiak Island, Alaska, collected for the Museum by Dr. Aleš Hrdlička in 1934.

*Physical anthropology.*—Eight accessions, amounting to 506 specimens in contrast with 743 last year, were received in the division of physical anthropology. The most important are: 268 specimens from Kodiak Island, collected by the curator, Dr. Aleš Hrdlička, which together with the previous material comprises the largest assemblage of human remains from a single site in Alaska, a collection that should throw considerable light upon changes in physical type in that region; a series of 141 specimens from prehistoric graves in Crimea, obtained through exchange with the State Central Anthropological Museum, Moscow, U. S. S. R.



## INSTALLATION AND PRESERVATION OF COLLECTIONS

*Ethnology.*—The several figures in the Bontoc-Igorot group were repainted, and a jungle fowl mounted appropriately was added to the exhibit. The principal new exhibit installed consists of a group of two Veddah lay figures representing a simple hunting tribe. The Siamese musician exhibit, long in storage, was reinstalled.

The second-floor rotunda exhibit of musical instruments is being rearranged to include type pieces from the music collections now housed in the Arts and Industries Building. Duplicate keyboard instruments and duplicate instruments of several other categories will be arranged in the rotunda of the third floor. This will be made possible by removal of the large collection of heating, lighting, and cooking objects and of the whaling collection to the Arts and Industries Building.

*Archeology.*—Work was begun on assembling a series of artifacts from Tennessee in preparation for a new exhibit to illustrate the diverse aboriginal cultures within that State. One new exhibit of Paleolithic implements from Palestine was installed, and two cases of Egyptian antiquities were revised. Temporary workmen cleaned and repainted a series of plaster replicas of Greek and Roman statuary, Assyrian and Egyptian carvings and temple inscriptions, and a replica of the famous Chac-Mool figure from Chichen Itza, Yucatan.

*Physical anthropology.*—This division contributed two cases, showing rare conditions of the jaws, teeth, and palate, to a special dental display sponsored by the District of Columbia Dental Society Five-State Postgraduate Clinic and held in the foyer March 8 to 11. At the close of the dental sessions the division exhibit was removed to the third floor of the rotunda, where it replaced the former exhibit relating to head size.

F. E. R. A. and W. P. A. workers have numbered a large quantity of material accumulated in recent years. There remain to be accessioned only two C. W. A. collections, and both are being repaired and cleaned; the numbering of them will start in the near future.

C. T. R. Bohannon, who worked in the division last winter, again rendered valuable assistance during the school year of 1925-36. He completed part of the Huntington collection, sorting out radii and ulnae by serial numbers and years and segregated other bones to facilitate future handling. He also experimented with new compounds used in hardening bones.

*Anthropological laboratory.*—The work of this laboratory was of a highly diverse nature. Molds and painted casts of various types of specimens, as pottery whistle, pottery infant in cradle, Folsom points, human effigy of limestone, ceremonial mace or scepter, and pipes, were prepared. Five busts showing the individual and racial

variations of American Whites, American Indians, and American Negroes, developed from facial masks made for a similar series for the Panama-Pacific Exposition in San Diego, Calif., in 1915, were completed. A plaster replica of a sandstone altar, made from the original in Guatemala by the Carnegie Institution, was painted in imitation of the original and installed on exhibition. Eight Indian life masks made in a previous year were bronzed. A plaster cast of an Egyptian lion was painted in imitation of the original of red granite, now in the British Museum.

The restoration and repairing of miscellaneous specimens occupied much time. These tasks included restoring and repainting a plaster cast of Chac-Mool; overhauling the Bontoc Igorot lay figure group; repairing, repainting, and reinstalling two plaster lay figures of the Veddah peoples; overhauling and reinstalling a lay figure of a Siamese musician; restoring two large globes of the world made in England in the seventeenth century; restorations to C. C. Hinton's statuette of "The Call to Arms"; numerous pieces of two large pottery salt pans (Indian); restoring a miniature model of "A Home and Garden"; polishing 17 pieces of silverware belonging to the Mary E. Maxwell collection; restoring and redecorating a large Chinese vase; treating wooden specimens of a loom from Pueblo Bonito with preservatives; repairing seven Indian baskets and a stone scraper; treating and polishing a mahogany carving of an elephant; and restoring 72 pieces of Indian pottery.

#### INVESTIGATION AND RESEARCH

The curator of anthropology, Frank M. Setzler, was engaged in completing his archeological report on the exploration of the Marks-ville prehistoric mound site in east-central Louisiana and in gathering data in the head curator's office for a historical résumé of the anthropological activities of the department since its organization under the Smithsonian Institution. With Jesse D. Jennings he also prepared the final report describing the Smithsonian-C. W. A. excavations of the Peachtree Mound, near Murphy, N. C. At the request of the Department of the Interior, Mr. Setzler accompanied Hillory A. Tolson, assistant director of the National Park Service, to the excavations being made at Jamestown Island, Va., in order to advise with Park Service officials concerning the archeological technique used for the verification of historical data. He also served in an advisory capacity with the Park Service on other anthropological and museum matters.

*Ethnology.*—The curator of ethnology, Herbert W. Krieger, worked on the preparation of manuscripts based on collections in the division, dealing with African art; culture of Algonkian tribes of tide-



water Virginia and Maryland; Arawak, Carib, and Ciboney material from the West Indies; and Chinookan and Shahaptian material from the Lower and Middle Columbia River Valley. After the death of Dr. Hough, Mr. Krieger assumed complete charge of the various sections dealing with ceramics, period art and textiles, and musical instruments.

Assistant Curator H. B. Collins, Jr., completed a detailed archeological report on the Old Bering Sea culture. A similar paper, on "Archeological Investigations on St. Lawrence Island, Alaska, and Their Bearing on the Problem of the Origin of Eskimo Culture", was awarded the gold medal of the Royal Danish Academy of Sciences and Letters.

The following objects in the collections were studied by outside investigators: Replicas of sand paintings; weavings of the Menominee, Chippewa, and Winnebago Indians; Pomo baskets; quilled and beaded costumes; the George Catlin collections of Indian costumes and paintings; the J. H. Sharp and C. B. King collections of Indian paintings; Japanese swords; Japanese and Chinese paintings on silk; crossbows; Chinese burial pottery; Plains Indian costumes; northern Athapascan costumes; and European period art, principally fans and laces.

Artists of the Index of American Design, under the W. P. A., sketched various objects in the collections. Several investigators of the Bureau of Indian Affairs studied Indian technology, particularly pictographic art, weavings of the northern Woodlands tribes, designs in mat weavings, beadwork, and quillwork. Among the material furnished the Bureau was a loan of two lay figures, that of the Blackfoot chief, Two Guns White Calf, and of a Sioux squaw, in connection with exhibits at Cleveland. The Soil Conservation Service used the division library in the study of Indian agriculture of the Southwest, and data were supplied for the construction of dioramas on frontier life and Indian agriculture.

The curator was called upon for advice in determining classifications of imports at the Baltimore and other customhouses in order to fix proper customs duties. Imports classified and evaluated included ceramics, glass, furniture, musical instruments, lighting devices, and miscellaneous objects.

Twenty lots of material were received for examination and report in ethnology proper and seven in ceramics.

*Archeology.*—The curator of archeology, Neil M. Judd, continued work on his manuscript on the Pueblo Bonito expeditions of the National Geographic Society. From July to December Assistant Curator Frank M. Setzler worked on a detailed report covering the excavations at Marksville, La., and during the visit of Jesse D. Jen-

nings he directed the classification of material resulting from the excavation of the Peachtree Mound, near Murphy, N. C., supervised by Mr. Jennings and William B. Colburn.

Outside students during the year studied Chinese, Japanese, and other collections of the Far East; artifacts recovered from the Peachtree Mound, N. C.; collections from the New England States; and specimens from the central and upper Mississippi Valley. Sixty-nine lots of material were received for identification and report and subsequently returned to the owners.

As representative of the Smithsonian Institution, Mr. Judd attended the Seventh American Scientific Congress at Mexico City in September, and thereafter he visited several well-known sites where the Mexican Department of Antiquities is pursuing important investigations. In June he visited museums and archeological sites near Rochester, N. Y. At the beginning of the fiscal year the assistant curator spent several days with the Smithsonian representative in charge of a large Federal relief archeological project near Macon, Ga.; late in July he visited Dayton, Ohio, in connection with a proposal to photograph from the air various prehistoric earthworks in Ohio, a desirable undertaking that will supplement the early surveys of Squier and Davis, published in the first volume of the Smithsonian Contributions to Knowledge. In September Mr. Setzler visited Mammoth Cave, Ky., at the request of the National Park Service, to advise with local officials in the preservation of the desiccated body of a prehistoric Indian, and in November he was engaged in studying the collection of Hopewell artifacts at the Field Museum in Chicago.

*Physical anthropology.*—The curator of physical anthropology, Dr. Aleš Hrdlička, spent most of his time finishing a manuscript on measurements of living Pueblos and measuring all femora from the Pueblos and the skulls obtained during the recent Kodiak Island expeditions. In addition he prepared short papers for the National Academy of Sciences and the American Philosophical Society.

The assistant curator, Dr. T. Dale Stewart, divided his time between the preparation of a manuscript on his anthropoid dissections and a report on the skeletal material from Chaco Canyon, N. Mex., collected by the National Geographic Society. In connection with the Chaco report he spent a week in December studying collections in the American Museum of Natural History in New York City.

Material used as bases of studies by outside investigators included the brain collection, Pueblo skeletal material belonging to the archeological horizon of Pueblo I, and Melanesian and Filipino skulls.

Five lots of material were received in this division for identification and report, as well as several lots of bones for identification brought in by Judge W. J. Graham in connection with his excavations of Indian sites along the Potomac River. Assistant Curator Stewart



late in March assisted Judge Graham in removing skeletal material from one of the sites in Stafford County, Va.

*Anthropological laboratory.*—Upon request of the Post Office Department two bronzed plaster casts of a life-size bust of Benjamin Franklin and one of George Washington were made from molds on hand. Life masks of George Stabler, age 50, and his daughter, Mariella Martha (Sacred Moon), age 12, of the Omaha, were made during the year.

The laboratory restored the wax head of a lay figure of John Paul Jones for the United States Naval Gun Factory; restored and regilded four large and two small picture frames for the National Gallery of Art; and assisted in the mold making and casting of two meteorites for the department of geology.

Through the Federal Art Project and the W. P. A., several extra men were assigned to the laboratory. These helpers repaired and painted 70 plaster casts, including Greek and Roman statuettes, life-size models and groups, models of Assyrian and Babylonian objects, and 30 pieces of pottery.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

*Ethnology.*—A gift collection of photographs of replicas painted by Hostin Claw, a Navaho artist, of Navaho sand paintings was forwarded to the University of California, and an additional set of the same was sent to Dr. Charles Gustav Jung, of Switzerland. Nineteen specimens were transferred to the division of history. Six accessions, totaling 64 specimens, were withdrawn.

*Archeology.*—Eleven lots of archeological material (76 specimens) were sent out in exchange. Five lots (137 specimens) were forwarded as gifts to educational institutions, as follows: 2 lots of fragmentary human jaws to the Columbia Dental School, New York City; a cast of a stone warclub to the City Museum, Vancouver, British Columbia; a lot of potsherds to the University of Southern California, Los Angeles; a lot of potsherds to the Ceramic Laboratory, Ann Arbor, Mich.; and 132 arrowheads, blades, and scrapers to the Delaware County Institute of Science, Media, Pa. Two drawings were presented to the Alabama Museum of Natural History, University, Ala. Ten samples of charred or partially decayed timbers from prehistoric ruins were sent, for possible determination of their age, to Dr. Florence M. Hawley, University of New Mexico; Dr. A. E. Douglass, University of Arizona; and Dr. Emil W. Haury, Gila Pueblo, Globe, Ariz. Ten historic Indian artifacts from California, Georgia, and Nevada and one historic Chinese bowl were transferred to the division of ethnology and two historic specimens to the division of engineering.

*Physical anthropology.*—Fifty deformed skulls of Pueblo and Peruvian Indians were sent to the State Central Anthropological Museum, Moscow, U. S. S. R., in exchange for one lot of prehistoric material from Crimea. One loan was returned to the owner; no gifts were made from this division during the year.

#### NUMBER OF SPECIMENS UNDER DEPARTMENT

During the year the department received 124 accessions covering a total of 4,856 specimens, which were assigned as follows: Ethnology, 57 accessions (3,134 specimens); archeology, 43 accessions (951 specimens); physical anthropology, 8 accessions (506 specimens); musical instruments, 4 accessions (215 specimens); ceramics, 9 accessions (26 specimens); and period art and textiles, 9 accessions (24 specimens). Twenty-four pieces of furniture temporarily assigned to the department have also been added to the section of period art and textiles.

On June 30, 1936, the total number of specimens in the department was as follows:

Ethnology-----	192, 379
Archeology-----	447, 364
Physical anthropology-----	34, 906
Musical instruments-----	2, 292
Ceramics-----	6, 330
Period art and textiles-----	1, 588
Total -----	684, 859



## DEPARTMENT OF BIOLOGY

(LEONHARD STEJNEGER, *Head Curator*)

The past year, as far as the department of biology is concerned, may be characterized as a normal period of progress without sensational features. The collections showed a healthy growth, and the work of their preservation for scientific use proceeded satisfactorily. Without a corresponding increase in the number of caretakers, however, the care of the growing accumulation of material must of necessity be at the expense of time and energy that should be devoted by the staff to scientific research.

In field work, apart from local biotic studies of faunal and floral problems, the botanical collecting of E. P. Killip during a fortnight's trip to the Florida Keys and a trip by W. M. Perrygo and C. Lingeback to gather mammal and bird material in West Virginia to complete our collections from that State deserve special mention.

### ACCESSIONS

The number of accessions, aggregating 1,258, with a total of 263,705 specimens, shows a normal influx of material. The important accessions are mostly collections limited to special groups and will be referred to under the various divisions, but attention is called to the increasing tendency of workers to deposit type specimens in the National Museum. In addition, the Museum has been singularly fortunate this year in acquiring older collections containing a considerable number of types and otherwise important historical material that has served as a basis for monographic studies by recognized authorities. There has also been a marked increase in the acquisition of species and genera hitherto not represented in our collections.

*Mammals*.—The outstanding addition in mammals was that of 465 specimens (2 primates, 172 bats, and 291 rodents) mostly from Africa, Asia, and South America, probably representing 300 forms not previously represented in our collection, which were received from the Field Museum of Natural History in exchange. The Zoological Society of San Diego, Calif., donated 3 Galapagos Island fur seals (*Arctocephalus galapagoensis*), and Capt. G. Allan Hancock gave 6 sea-lion skulls from San Benito Island, Lower California, and a porpoise skull (*Delphinus*) from Escondido Bay, Gulf of California. A whale fetus (*Megaptera*) from Port Hobron, Alaska, was received as a gift from Marc Lagen, of Seattle. J. B. Edwards, of the Museo Nacional, Tegucigalpa, Honduras, presented the skin of a water opossum (*Chironectes argyrodites*) from Honduras.

*Birds.*—Worthy of special mention is a collection of 470 skins and 47 skeletons of Siamese birds made by H. G. Deignan for the Museum. Eleven skins of Rhodesian birds new to the Museum, including three genera (*Scotopelia*, *Pachycoccyx*, and *Pinarornis*) hitherto unrepresented here, were acquired from D. Townsley. From the Minneapolis Public Library the type specimen of *Geocichla cinerea*, a Philippine thrush, was obtained by exchange. Another type specimen, *Buteo platypterus brunnescens*, the Puerto Rican broad-winged hawk, was donated by Dr. Stuart T. Danforth of Mayagüez, Puerto Rico, who also presented the Museum with another hawk, *Chondrohierax uncinatus mirus*, new to the collection. Dr. George M. Sutton, Cornell University, donated a paratype of a new race of Carolina chickadee (*Parus carolinensis extimus*). Señor Armando Dugand G., of Barranquilla, presented 64 bird skins from Colombia, and 88 skins of birds from Honduras were obtained by exchange with C. F. Underwood. Other additions to the collection included 222 skeletons from Cameroun, West Africa, and 37 skeletons from Chile, besides 55 bird skulls donated by Dr. A. K. Fisher. Dr. A. Wetmore contributed 132 alcoholics and 3 skeletons in addition to 77 skins and 7 eggs. Of rarer species, 2 specimens of Thayer's gull, 1 skin of the South Trinidad petrel (*Pterodroma arminjoniana*), the first received in North America, and one alcoholic specimen of the Zapata rail (*Cyanolimnas cerverai*) were obtained in exchange, while two specimens of Riker's woodhewer (*Berlepschia rikeri*) were donated by Francisco de Queiroz Lima, of Pará, Brazil.

*Reptiles and amphibians.*—The largest entry during the year was that of the amphibians and reptiles collected by Dr. C. E. Burt and several correspondents for the Museum during the summers of 1934 and 1935, representing 1,601 specimens from Tennessee, Mississippi, Louisiana, Arkansas, Oklahoma, Kansas, and Missouri. A specially important feature is the large number of Testudinata included. From the Instituto Butantan, São Paulo, Brazil, there came as a gift a collection of 102 named reptiles. The last installment of the reptiles and amphibians collected by Dr. Hugh M. Smith in Siam was accessioned during the year, consisting of 92 specimens. A small collection from Szechwan, China, was also received from Dr. D. C. Graham. Dr. W. P. Hay donated a collection of miscellaneous North American reptiles and amphibians. A number of smaller but interesting collections from tropical America were received (by gift or purchase) from George Payne, Virgin Islands; Dr. Baltasar Guevara Amortegui, Colombia; Joaquim Venancio and Emmanuel Diaz, Brazil; and Prof. Clodoveo Carrión, Ecuador. Interesting collections of amphibians were received from Virginia and South Carolina, presented by Stuart Abraham and Prof. A. L. Pickens, respectively.



*Fishes*.—Sixty-five accessions, totaling 3,374 specimens, of fishes were received during the year. The most important single specimen was a fine large sailfish caught off Cocos Island, Costa Rica, by President Franklin D. Roosevelt, and presented by him to the Museum. Large game fishes in the flesh seldom reach ichthyologists, and measurements and photographs of much value were made of the iced specimen before it was mounted. Also from President Roosevelt came a large "great amberjack" (*Seriola lalandi*), caught off Caicos Island, West Indies. Most important of the larger accessions was a series of 453 finely preserved fishes from the Upper Amazon, a gift of William G. Scherer, of Iquitos, Peru. Also of considerable interest were 114 specimens, mostly from the Amazon drainage of Colombia, presented by Brother Nicéforo-Maria, of the Instituto de La Salle in Bogota, and 330 specimens from the Malay Peninsula, China, Ceylon, Africa, and South America, obtained from Dr. Albert W. Herre. The growing series of Virginia fishes was enriched by 606 specimens from southeastern Virginia collected for the Museum by Dr. G. S. Myers and Stuart Abraham and by several small collections presented by Dr. Paul Bartsch. Dr. W. H. Longley, of Goucher College, Baltimore, presented the holotypes of 3 fishes (*Cerdale floridana*, *Triacanthodes lineatus*, and *Pronotogrammus aureorubens*). Percy Viosca, Jr., of New Orleans, presented the holotype and paratypes of a new rock-bass (*Ambloplites ariommus*) from Louisiana, and Gordon Gunter, of Moreauville, La., presented the holotype of a new sole. A lot of 739 specimens was transferred by the Bureau of Fisheries, 69 fishes from Honduras were presented by C. J. Blanchard, of Washington, D. C., and 4 very interesting fishes from Ecuador, one of them representing the recently described *Lipopterichthys carrioni*, were a gift of Prof. Clodoveo Carrión, of Loja, Ecuador. Especially welcome were 6 fine paddlefishes donated by the Illinois State Natural History Survey, through Dr. D. H. Thompson, and a hybrid sturgeon from the Volga given by Leo Shapovalov, of Stanford University.

*Insects*.—The total number of accessions for the year is 255, an increase of four over the previous year. The total number of specimens accessioned during the year is 134,755, while those for the fiscal year amounted to 116,717. The more important accessions received include the following: A collection of Rhyncophora received as a gift from L. L. Buchanan comprising the Bovie collection of weevils purchased by Mr. Buchanan some years ago from the dealer Emmerich Reitter. While this collection contains many species new to the Museum, its chief importance lies in the authenticity of the determinations. Bovie was a well-known specialist in the weevils, and several of the fascicles of Genera Insectorum (Wytsman) are based upon this collection. Through the kindness of Miss Edna Beutenmüller,

the remains of the Beutenmüller collection of Cynipidae and their galls were transferred by gift to the National Museum. This collection contains about 4,500 specimens of gall-wasps and about 3,800 galls. Many holotypes and a great many paratypes were included. The collection of ectoparasites of rodents, built up by the staff of the National Institute of Health and contained in about 20,000 vials, was received by transfer. An examination of one gross of vials showed an average of 10 specimens to the vial. If this is taken as representative of the collection, there are not far from 200,000 specimens. The material is mostly fleas and mites but also contains a considerable quantity of lice. The collection of Cleridae of Alan S. Nicolay has been acquired by the Museum. The importance of this collection lies in the fact that all the types of species described by the late Charles Schaeffer that were not already in the Museum are now here. The important accessions of insects from the Rev. David C. Graham during the year have amounted to about 12,000 specimens. About 44,000 miscellaneous insects retained by the various specialists on the taxonomic staff of the Bureau of Entomology out of material received by them for identification were added to the collection.

*Marine invertebrates.*—The total number of accessions of marine invertebrates for the year is 174, bringing to the Museum a total of 11,300 specimens. Capt. R. A. Bartlett, of New York, presented a large collection of marine invertebrates from Greenland waters. The Bureau of Fisheries transferred a collection of alcyonarians, hydrocorals, and hydroids taken by the *Albatross* in Japanese waters in 1906; also types of 10 new species of polyclad worms. Miss Cynthia Davis, Washington, D. C., donated a beautiful perfect specimen of the Venus flowerbasket sponge (*Euplectella speciosa*) from the Philippine Islands. Miss Harriet Exline, University of Washington, presented a collection of pycnogonids, including types of three new species. Dr. Norma C. Furtos, Cleveland, Ohio, donated a collection of ostracods, including types and paratypes of 10 new species, and type of one new variety from Florida; also types and paratypes of three new species and types of two new varieties from Massachusetts. Miss Olga Hartman, University of California, donated a collection of marine annelid worms, including types of 13 new species and paratypes of 6 new species. Dr. W. P. Hay, Kensington, Md., presented a collection of miscellaneous zoological material. Dr. Carl L. Hubbs, University of Michigan, donated six cotypes of the phyllopod *Branchinecta occidentalis* Dodds. From the Hydrographic Department, Imperial Japanese Navy, Tokyo, were received 100 bottom samples collected by Japanese surveying vessels; from Prof. J. G. Mackin, Ada, Okla., a collection of Crustacea, including paratypes of two new species of isopods, two new species of amphipods, and



one new species of Cladocera; from the Museo Argentino di Ciencias Naturales, Buenos Aires, 2 cotypes of the amphipod *Corophium rioplatensis* Giambiagi; from Dr. Charles Snowden Piggot, Geophysical Laboratory, Washington, D. C., one-half of a core sample about 8 feet long taken from the bottom of the Atlantic Ocean in latitude 39° 13' N., longitude 72° W., at a depth of 1,200 fathoms; from the South African Museum, Capetown, the type of a new species of anomuran; from Dr. Willis L. Tressler, University of Buffalo, N. Y., 16 new species of ostracods, one of them being also a new genus; from Dr. C. B. Wilson, Westfield, Mass., a large collection of copepods and isopods from various sources and localities. A large collection of Crustacea was received by exchange from the Zoological Institute, Academy of Sciences, Leningrad, U. S. S. R.

*Mollusks*.—The number of accessions of mollusks was 126, aggregating 50,775 specimens as compared with 51,036 received last year. Of these 15,340 were secured through purchase by the Frances Lea Chamberlain Fund; about 11,000 were turned in by Dr. Paul Bartsch from the region about Washington and the adjacent mountains and the coast, and 13,135 specimens were collected by Dr. J. P. E. Morrison during several excursions into Virginia, West Virginia, Maryland, and the Carolinas. Among the others the following deserve special notice: 21 specimens (paratypes) from the Philippines received from the Senckenbergische Naturforschende Gesellschaft, Frankfurt-am-Main, Germany; 72 specimens, including seven paratype lots and one topotype lot from Nevada, California, and Mexico, obtained from S. S. Berry, Redlands, Calif.; two specimens of cotypes of Cuban species from George C. Spence, Cheshire, England; two specimens from the Gulf of California and Nicaragua, one of which is a paratype, from Herbert N. Lowe, Long Beach, Calif. Dr. Y. T. Yao, Nanking, China, sent 73 specimens of *Oncomelania* from China, including intermediate hosts of *Schistosoma japonicum*, and Dr. Chung-Chang Tang, Foochow, sent about 300 shells of a new species, including the type, also intermediate host of *Schistosoma japonicum*. From Dr. J. E. Alicata, Honolulu, 5,183 specimens of fresh-water shells involved as intermediate hosts of the liver fluke in cattle, were received. Dr. Allen Archer, Cambridge, Mass., donated 220 specimens of land shells from the Southern United States; the United States Bureau of Fisheries transmitted 372 specimens, and the United States Biological Survey 370 specimens from Mexico; the University of Michigan donated 306 Guatemalan specimens; 450 specimens from Brazil and Uruguay were received from Dr. F. Felippone, Montevideo; and 80 Cuban specimens, including two lots of paratypes, from Dr. C. G. Aguayo, Habana. Capt. R. A. Bartlett, New York, contributed 430 specimens of marine mollusks from West Greenland.

*Helminths*.—Accessions for the year numbered 19, representing about 57 specimens, 13 of which were types of new species, as follows: From Dr. Charles M. Africa, Manila, Philippine Islands, eight slides of trematodes; from Prof. William H. Bayliff, Annapolis, Md., two specimens of trematodes; from Prof. Eduardo Caballero y C., Instituto de Biología, Chapultepec, Mexico, one nematode and two helminths; from Dr. D. C. Graham, Szechwan, China, three specimens of helminths; from Dr. Frederick J. Holl, University of Buffalo, type specimens of *Dasymetra nicolli* Holl and *Zeugorchis brachyoesophagidium* Holl; from Edgar Huckleby, Boom, Tenn., one specimen of hairworm; from Dr. R. Chester Hughes, Oklahoma Agricultural and Mechanical College, five slides of the type specimen of *Diplostomulum ambystomae* Rankin and Hughes; from Prof. Lloyd G. Ingles, State Teachers' College, Chico, Calif., 10 type specimens of helminths; from Byron C. Marshall, Ozark Biological Laboratory, Imboden, Ark., four lots of helminths; from Dr. Allen E. Noble, College of the Pacific, Stockton, Calif., four specimens of trematodes; from Prof. Charles Pérez, Paris, France, two specimens of helminths; from J. S. Rankin, Jr., Duke University, seven specimens of helminths; from Dr. Everett P. Veatch, Baltimore, Md., 3 specimens of mermithids; and from Raymond Williams, Roscommon, Mich., 1 specimen of tapeworm.

*Echinoderms*.—The number of accessions received was 12, of which the most important were a large collection of echinoderms, representing all the classes, from the seas about Greenland, made by Capt. Robert A. Bartlett, and a set of 31 specimens of unstalked crinoids from the *Snellius* expedition, an interesting and valuable supplement to the *Siboga* expedition of many years ago.

*Plants*.—The number of accessions of plants is 389 lots, comprising 54,147 specimens. Among the more important accessions are 15,839 specimens transferred by the United States Bureau of Plant Industry. This material includes several items of exceptional interest and value, viz: The cactus collection assembled by the late David Griffiths, consisting of about 5,000 specimens (chiefly *Opuntia*), besides many watercolor paintings, sketches, notes, photographs, and other illustrative material; 2,613 specimens collected in little-known parts of Brazil by Boris A. Krukoff; about 2,500 specimens from Ecuador, collected by Mrs. Ynes Mexía; 1,205 specimens collected in northern South America by W. A. Archer; about 1,500 specimens from Inner Mongolia and North Manchuria; 700 specimens from Arizona; and about 310 specimens from Death Valley, Calif. From the Academy of Natural Sciences of Philadelphia came in exchange 2,240 specimens collected in Mexico by Dr. F. W. Pennell, while 3,906 specimens were received from the University of Michigan, Ann



Arbor, Mich., in exchange. Of the latter 2,500 were collected in India by W. Koelz, about 900 are from Sumatra, and the remainder from Mexico and Central America. From the New York Botanical Garden, 3,708 specimens and photographs were received in exchange. Of this number 1,613 are from Fiji and 1,634 from Hainan. A large number of important exchanges have been made with various museums and institutions, the most noteworthy being 1,079 specimens, mostly from tropical America, received from Naturhistoriska Riksmuseet, Stockholm; 669 specimens of mosses and hepatics, mainly belonging to historic exsiccatae, from the Farlow Herbarium, Harvard University; 1,170 specimens and photographs of type specimens from the Gray Herbarium; 539 Polynesian specimens, about one-half consisting of grasses, from the Bernice P. Bishop Museum; 402 Alaskan specimens from Dr. Eric Hultén, Lund, Sweden; 416 specimens of the historic Mutis collection of Colombian plants received from the Jardin Botánico, Madrid; 365 herbarium specimens of tropical trees, mainly from Africa and India, received from the Imperial Forestry Institute, Oxford, England; and 335 specimens from China, received from Lingnan University, Canton, China.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

The most important change made in the exhibition series was the installation of the large sailfish caught and presented by President Roosevelt, as mentioned above under Accessions. The mounting of the specimen occupied the taxidermist staff for some time and reflects great credit on W. L. Brown and his staff, who at the end of the year were engaged in the still more difficult task of mounting an 1,800-pound sunfish. Important replacements and additions to the mammal exhibits include among others a fine Indian tiger, a Bornean wild cat, an Asiatic jackal, and a young Saiga antelope, a rare specimen from the Turkestan Steppes. The walrus skeleton was remounted and reinstalled, and six whale skulls were placed on exhibition in the whale hall on the second floor. Twenty-two birds were added to the District of Columbia faunal exhibit, and the entire bird exhibit for this area was rearranged in accordance with modern classifications. To the District collection was also added a series of casts of frogs and salamanders from the environs of Washington.

In connection with the meeting in Washington of the North American Wildlife Conference in February 1936, a special exhibit of North American animals extinct during historical times or threatened with extinction was arranged in the foyer. This included the group of the passenger pigeon; a case with the mounted specimen, a mounted skeleton, and the egg of the extinct great auk, specimens of the Labrador duck, the ivory-billed woodpecker, the Carolina parakeet, and

other birds; a case showing the skins and breast bones with the wind-pipe of the trumpeter swan and the whistling swan; another case showing a net and other apparatus used in catching passenger pigeons that contributed to their eventual extinction; a mounted specimen of the sea-otter, and skins with skulls of bison and prong-horn, and skulls of the northern sea-cow and the eastern grizzly bear. Paintings of the great auk and the spectacled cormorant and the two large paintings by Moser of the destruction of the great bison herds were included. A frame made of the lower jaw bones of the nearly extinct bowhead whale formed an appropriate and impressive entrance to the exhibit.

Much time was spent in identifying, labeling, and rearranging Old World mammal skins and skulls, especially collections from Siam and China, a work not yet finished. Further progress was made in intercalating the Merriam collection of skins and skulls, which has hitherto been kept separate, in the general series.

A considerable number of large skulls were cleaned during the year, necessitating the spreading of various groups in the attic. Owing to the large amount of ungulate material received during the past few years there still remain considerable shifting and rearrangement to be done. A card index of the entire collection of skeletal material has been completed.

A great deal of work has been done on the alcoholic collection, in transferring specimens to proper containers, identifying material, and general rearrangement.

The taxidermists made up 22 skins as study specimens, degreased and scraped 9 skins, skinned 21 fresh specimens, roughed out a number of skeletons, and removed 17 sets of leg bones, besides other routine work on skins. Satisfactory progress has been made in disposing of the accumulated uncleaned medium and large skulls and skeletons.

Of the bird collections previously held up as separate units awaiting identification and study, the remainder of the Siamese material has been worked up and distributed in the study series. The same is true of a small collection of birds from Honduras and of certain hawks and their allies from North and Middle America. The identification and modernized labeling of the study series was continued. This included the remainder of the Siamese collections worked over by the associate curator, the Falconiformes studied by the curator, and all the Dendrocolaptidae, Formicariidae, and Fumariidae of the Holt collection identified and labeled by M. A. Carriker, Jr., of the Academy of Natural Sciences of Philadelphia. The entire skeletal collection was rearranged and expanded, involving 120 quarter-unit cases. The entire alcoholic collection was rearranged in accordance with modern classification and expanded to include 17 additional shelves



in the alcoholic stacks. The work begun last year on the Bent collection of eggs was completed, and the entire foreign egg collection was merged with the North American collection, making one world-wide series for the first time.

Cataloging and labeling in the division of reptiles were brought up to date, and 1,926 specimens were card-cataloged and distributed in the stacks. The alcoholic collections were gone over, evaporated alcohol replenished, and containers, especially old cork-stopper and screw-top jars, when found defective replaced with glass-stopper jars. The taxidermists made up 50 skins of turtles and cleaned 15 shells and 70 skulls, besides performing other necessary routine work.

In the division of fishes a great amount of general curatorial work, such as the identification, cataloging, bottling, labeling, card-indexing, and installation of both new accessions and old miscellaneous material, was accomplished. During the early part of the year F. E. R. A. workers assigned to the division made possible the card-indexing of a considerable part of the study collection. Card-indexing of the divisional library was also begun but had to be discontinued before completion. The routine refilling of containers in the study collections was continued. The appointment of a clerk-stenographer during the last quarter of the year has speeded the routine work materially.

In the division of insects work on the study collections progressed steadily, but space limits are greatly hampering the work in certain sections, notably Lepidoptera and Diptera.

In the collection of coleopterous larvae, which is in Dr. A. G. Böving's charge, considerable valuable material consisting of scarabaeid larvae definitely determined to species by rearing from eggs has been turned over for study and description by the division of cereal and forage insects and the division of forest insect investigations of the Bureau of Entomology and Plant Quarantine. W. S. Fisher and H. S. Barber rearranged miscellaneous genera in various families of Coleoptera where this was made imperative by identification demands; and L. L. Buchanan reports definite improvement in the arrangement of the Curculionidae and also that the West Indian, Mexican, and Central American specimens of this group have been transferred from cork-lined drawers to trays. Toward the end of the fiscal year progress was made in the sorting of the large quantity of unmounted material received with the Wickham collection in 1934. Considerable coleopterous material awaits incorporation in the regular collections, but in most instances it will first require critical study of the groups involved.

August Busck performed regular curatorial work demanded by the collections of Microlepidoptera in his care. He reports the collections of these groups are, on the whole, in fine order, easily acces-

sible for systematic work and available to other workers. Carl Heinrich reports that the entire alcoholic collection of lepidopterous larvae received careful attention and is in better condition than during the preceding fiscal year. The larval collections of two families, the Gracilariidae and the Tortricidae, are still uncataloged, and these as well as the Engelhardt collection of aegeriid larvae require rearrangement and transfer to proper containers. Some work in the rearrangement of the tropical American Megalopygidae was carried on during the year. Dr. W. Schaus reports that the collections of exotic Lepidoptera, particularly of South America and the Orient, have been considerably expanded. David G. Hall was transferred to the taxonomic staff and made responsible for the work on the muscoid Diptera. With the assignment of the studies on *Anastrepha* to Dr. Alan Stone, following the death of Dr. Foster H. Benjamin, the Cecidomyiidae were returned to the care of C. T. Greene. The status of the Syrphidae was improved by F. M. Hull, who borrowed and worked over the Museum material belonging to certain parts of the group. Dr. Alan Stone states that work has been continued in the labeling and arranging of the collections in his care, and that this has been completed for 12 families involving 108 insect drawers. In connection with the status of the collections of muscoid Diptera, D. G. Hall reports that the C. H. T. Townsend collection of muscoid genotypes was partially incorporated in the working collection. Also Dr. Aldrich's collection of Muscoides has been, in part, incorporated in the general collection. In the aculeate Hymenoptera, Miss Grace Sandhouse studied and named to species, so far as possible, the Museum's collection of Nearctic *Astata*, Chinese *Polistes*, oriental *Odynerus*, and Nearctic *Megachile*; also the undetermined wasps belonging to the genus *Pseudomethoca* and to the subfamily Polybiinae, as well as the Chinese wasps of the genus *Vespa*. With the parasitic forms minor improvements were made, involving rearrangement in various groups. The value of the collection was increased very definitely by the incorporation of a large quantity of material received for identification from various sources, including numerous species not previously represented in the collections. The collections of heteropterous families Pyrrhocoridae, Gerridae, and Veliidae were reworked by H. G. Barber and arranged in trays. Both H. G. Barber, in charge of the Heteroptera, and P. W. Oman, who is responsible for the collections of Homoptera, report the addition to these collections of large numbers of specimens received for identification. With reference to the Aphididae and Aleyrodidae, Dr. P. W. Mason states that a considerable quantity of new material was incorporated in the collections and that the collection of the genus *Myzus* was rearranged to conform with a revision of the group now nearing completion.



In the division of mollusks the duplicate collection was rearranged and made more easily accessible. In the corals part of the collection was transferred from open racks into quarter-unit cases.

In the division of plants 24,015 mounted specimens of flowering plants during the year were stamped and recorded and part of this material, mostly South American flowering plants and ferns from all sources, was incorporated in the collection. There are in addition about 20,000 specimens that still await mounting. The work of mounting progressed steadily during the year, reaching a total of 34,509 sheets. In connection with identification work certain groups were rearranged, and, as above stated, South American material was incorporated. The long-deferred project of arranging miscellaneous material (fruit, cones, seeds, and unusually bulky specimens) in a special series is now well along toward completion.

E. C. Leonard continued to care for the cryptogamic collection, giving particular attention to the moss and algae herbaria to which several thousand specimens have been added. The segregation of type specimens of American flowering plants was continued, 20,333 types of new species and varieties having now been cataloged and placed in heavy individual covers. The work of inserting in the general herbarium sheets bearing cross reference labels to specimens placed in the type herbarium is near completion.

#### INVESTIGATION AND RESEARCH

The curator of mammals, Gerrit S. Miller, Jr., made progress with a work on the classification of the primates. He gave much time to the identification of the rodents in the Smith Siamese collection, in which work he received valuable volunteer cooperation from Clarence Smith, of the Biological Survey. He also worked on the determination of osteological material from culture sites in widely separated regions. The assistant curator, Dr. Remington Kellogg, completed a manuscript of several hundred pages dealing with the oldest of all known whales, the *Archaeocetes*. He also continued studies on other recent and fossil cetaceans, and spent considerable time in identifying Chinese mammals collected by Dr. D. C. Graham in Szechwan. Besides this he assisted in the identification of the large series of bones collected by Dr. A. Hrdlička at a native village site on Kodiak Island, as well as similar archeological material from localities in the United States. A. J. Poole, aid, continued work on the revised catalog of type specimens of mammals. H. H. Shamel assisted in the determination of material from culture sites.

The curator of birds, Dr. Herbert Friedmann, continued work on the Falconiformes in connection with Ridgway's unfinished work "The Birds of North and Middle America" and completed this

volume. He also completed the manuscript covering the sun bitterns, the sun grebes, cranes, limpkins, and about half of the rails for the next volume. In the course of this work he had occasion to revise a number of forms, and these incidental studies resulted in two short papers. He also published a report on the birds of Kodiak Island and the results of his work on vitamin D deficiency in young starlings and sparrows, as well as a short study in conjunction with Malcolm Davis of the National Zoological Park on the flightless cormorant. His manuscript on Tanganyikan birds, completed four years ago for the Museum of Comparative Zoology at Harvard University, was brought up to date and made ready for publication. The associate curator, J. H. Riley, completed studies on the large collections of Siamese birds made by Dr. H. M. Smith and by the late Dr. W. L. Abbott, and his report on the birds of Siam is about ready for publication. He began a study of the collections made by Dr. Abbott from Engano Island and other islands off the west coast of Sumatra. Dr. Alexander Wetmore continued work as time and opportunity permitted on fossil and recent birds, finishing several papers.

During his visit to Europe in the fall of 1935 to attend an International Congress of Entomology in Madrid and of Zoology at Lisbon, the curator of reptiles, Dr. L. Stejneger, examined the extensive collection of Testudinata in the Museum at Paris, particularly the numerous types of North and Middle American species in connection with his studies of this group. Dr. Doris M. Cochran, the assistant curator, nearly finished her notes on Brazilian tree frogs as part of the results of her trip of exploration to that country.

In the division of fishes the assistant curator, Dr. G. S. Myers, spent some time working on the Johnson-Smithsonian deep-sea expedition fishes, and completed one short paper on them. He also prepared papers on the cyprinodont fishes of Haiti, on the genera of Polynemidae, on the Scatophagidae, on the Albulidae, and on a collection of fishes from Lake Tanganyika, and two short descriptions of new fishes from the Amazon. E. D. Reid prepared a revision of the blennioid family Microdesmidae and, in collaboration with the assistant curator, a description of a new blenny from Panama. Dr. Hugh M. Smith worked on the collections of fishes made by him in Siam, particularly on *Toxotes*.

The curator of insects, Dr. E. A. Chapin, described an interesting genus of Staphylinidae, new to the Western Hemisphere, and was occupied with work looking toward a revision of the scarabaeid genus *Listrochelus*. Through the kindness of Dr. J. B. Reeside, Jr., of the United States Geological Survey, a fine fossil of a homopterous insect from the Fox Hills Cretaceous was made available for study. Research by members of the taxonomic staff of the Bureau of Ento-



mology and Plant Quarantine progressed as usual. Dr. A. G. Böving made a thorough study of the larva of *Plectris aliena* Chapin and in a manuscript dealing with this form established a new terminology for the various parts of the epipharynx and raster of scarabaeid larvae. This is fundamental to research on the larvae of *Phyllophaga* that has been begun. Generic and specific keys to the larvae of the Nitidulidae, which he has had in manuscript, were revised to include certain genera and species not previously studied. Notes and figures relating to curculionid larvae are being constantly accumulated with the object of eventually publishing a classification of the larvae of this family. Taxonomic studies on the West Indian species of *Apion*, *Calendra*, and *Panophthalmus* were completed by L. L. Buchanan, who has also begun a study of the United States species of *Acamptus*. W. S. Fisher and H. S. Barber, in connection with their identification work, worked over numerous small complexes of species in various families.

In the section of Lepidoptera, Dr. W. Schaus completed a large work on the Noctuidae, Geometridae, and Pyralidae of Puerto Rico. August Busck reports continued progress on a revision of the Tortricidae. He is also preparing a revision of the economically important family Gelechiidae. Carl Heinrich continued studies of the American Phycitinae, in which genitalia preparations have now been made for nearly all the species. Further progress was made on a review of the Phycitinae of Puerto Rico. He also expects to complete soon a revision of the genus *Rupela*. Studies were begun by J. F. Gates Clarke on certain groups of Noctuidae.

In the section of Diptera, D. G. Hall continued studies of the Sarcophaginae of the world. He also completed revision of the genera *Wohlfartia* and *Doryphorophaga* and made considerable progress in working up the tachinid genus *Lispidea*. A small paper involving the dexiid genera *Phorostoma*, *Billaea*, *Myocera*, and *Myostoma* was also completed. Dr. Alan Stone continued work on the Nearctic Tabanidae and undertook the revision of the fruit-fly genus *Anastrepha*. In this connection he completed a preliminary paper describing 13 new species, names for which are urgently desired for use in investigations being conducted by other divisions of the Bureau of Entomology and Plant Quarantine.

In the aculeate Hymenoptera, Miss Grace Sandhouse began a revision of the genus *Trypoxylon* for which most of the types, both at this Museum and elsewhere, were checked and a key to the species prepared. A paper on Cuban bees was also in progress. In the parasitic Hymenoptera, R. A. Cushman nearly completed a revision of the ichneumonid genus *Exetastes*, completed a paper revising the genus *Brachycyrtus*, and prepared descriptions of a considerable number of

new species of Ichneumonidae. A. B. Gahan continued studies in various small groups of the Chalcidoidea and prepared working keys to some of them. C. F. W. Muesebeck continued work on the revision of the braconid genus *Orgilus* mentioned in the last report. Before his death, A. N. Caudell, working jointly with H. A. Allard, of the Bureau of Plant Industry, had nearly completed a manual of the Orthoptera of Virginia, Maryland, and the District of Columbia. It is understood that Mr. Allard will finish this work.

H. E. Ewing prepared a revision of the monkey-infesting species of the genus *Pediculus* and nearly completed keys to the genera and higher groups of the order Siphonaptera. H. G. Barber finished a large manuscript on the Hemiptera-Heteroptera of Puerto Rico and conducted studies in the families Gelastocoridae, Naucoridae, and Belastomatidae. In the Homoptera, P. W. Oman prepared for publication a generic revision of the American Bythoscopinae and South American Jassinae; also a revision of the South American species of *Xerophloea*. In addition, he made preliminary studies on the North American species of *Oncometopia* and *Scaphoideus*. Dr. P. W. Mason nearly completed a revision of the aphid genus *Myzus*.

In the division of marine invertebrates, Dr. Mary J. Rathbun, associate in zoology, completed the identification of all undetermined American crabs in our collections, a task that involved the classification and naming of many thousands of specimens. In addition, she brought up to date her manuscript on "The Oxystomatous and Allied Crabs of America" and about completed a report on an extensive collection of fossil Crustacea from Venezuela. Two papers from her pen were published during the year—"Brachyuran Crustacea from Bonaire, Curaçao, and Aruba" and the Crustacea of the "Scientific Results of an Expedition to Rain Forest Regions in Eastern Africa." One paper by the curator, Dr. Waldo L. Schmitt, on the "Macruran and Anomuran Crustacea of Bonaire, Curaçao, and Aruba" appeared in print during the year. A second one on a new species of sandbug from South Africa was in press. Considerable assistance was rendered various students and other workers on decapod Crustacea in supplying critical notes on specimens in our collections and others submitted for examinations.

Clarence R. Shoemaker, assistant curator of marine invertebrates, worked on the large collection of bathypelagic amphipods taken by Dr. William Beebe at Bermuda and on the identification of current amphipod material. Two manuscripts based on his studies were published during the year. J. O. Maloney, aid, as time permitted continued his studies on the Bartlett, Johnson-Smithsonian, and Hancock isopod collections. As in past years, he made all determinations of isopods intercepted by the Bureau of Entomology and Plant Quarant-



tine. Dr. C. B. Wilson, collaborator in Copepoda, spent much time on the copepods of the plankton collections taken by Capt. Robert A. Bartlett and in determining miscellaneous odd lots of material. He published four papers based on Museum collections. Dr. J. A. Cushman, collaborator in Foraminifera, continued studies on recent and fossil Foraminifera and published two papers on recent forms.

Dr. Paul Bartsch, curator of mollusks, with the assistance of Dr. H. A. Rehder, assistant curator, prepared a report on the marine bivalve mollusks of the Hawaiian Islands, which has been transmitted to the Bishop Museum of Honolulu for publication. He also prepared, among others, a paper entitled "Molluscan Intermediate Hosts of the Asiatic Blood Fluke, *Schistosoma japonicum*, and Species Confused with Them."

Austin H. Clark, curator of echinoderms, completed part 4 of the comatulid volume of his "Monograph of Existing Crinoids" except for the photographs necessary for the illustrations. He continued work on the echinoderms of the Johnson-Smithsonian deep-sea expedition and began work on the crinoids of the John Murray expedition to the Indian Ocean. This expedition was carried out by His Egyptian Majesty's steamer *Mabahiss* in 1933-1934 under the leadership of Lt. Col. R. B. Seymour-Sewell. The collection is important, as little deep-sea dredging has heretofore been done in the region between the east coast of Africa and the west coast of India.

Dr. F. V. Coville, honorary curator of the National Herbarium, continued studies of *Vaccinium* and of the flora of the Death Valley region, Calif.; E. P. Killip, associate curator, published several papers on *Bomarea* and Urticaceae in continuation of earlier studies. saw through the press a paper prepared jointly with Dr. N. L. Britton entitled "Mimosaceae and Caesalpiniaceae of Colombia", and prepared a manuscript of Passiflora as represented in the Yucatan region. In cooperation with C. V. Morton he completed the revision of the Mexican and Central American species of *Smilax*, mentioned last year. E. C. Leonard, assistant curator, continuing his studies of the Acanthaceae, completed a synopsis of this family as represented in the Yucatan Peninsula. C. V. Morton, aid, prepared similar articles on the genus *Dioscorea* and the family Malpighiaceae in Yucatan and adjacent territory. These five papers and a descriptive treatise of Yucatan grasses by J. R. Swallen are parts of Carnegie Institution of Washington Publication no. 461 entitled "Botany of the Maya Area: Miscellaneous Papers." E. H. Walker, aid, continued work on Chinese Myrsinaceae and completed the bibliography of eastern Asiatic botany, upon which he has been engaged jointly with Dr. E. D. Merrill, bringing it up to January 1936. Manuscript of a manual of West Indian grasses was completed by Dr. A. S. Hitchcock a few months before his death.

## DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate specimens distributed to museums, colleges, high schools, and similar institutions aggregated 1,605 specimens, and 8,191 specimens were sent out in exchange, of which 1,605 were zoological. The 2,591 plants distributed went to 29 institutions and correspondents, of which 19 were in the United States and 10 in six countries abroad.

## NUMBER OF SPECIMENS UNDER DEPARTMENT

The number of specimens given below is based on the numbers estimated for the previous fiscal year with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. In the present year the estimate of the number of specimens in the division of fishes has been increased through revision of the material in the *Albatross* Philippine collection. Several collections, as the corals, of which no estimate has as yet been made, are not included, nor does the number of plants given include the lower cryptogams and duplicates. In several of the divisions, lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds or even thousands of individuals the enumeration of which could serve no useful purpose.

Mammals .....	223, 828
Birds:	
Skins .....	259, 685
Alcoholics .....	9, 843
Skeletons .....	14, 806
Eggs .....	89, 806
	<hr/>
	374, 140
Reptiles and amphibians .....	111, 141
Fishes .....	1, 103, 106
Insects .....	4, 591, 932
Marine invertebrates .....	944, 375
Mollusks .....	2, 608, 225
Helminths .....	144, 470
Echinoderms .....	165, 189
Plants .....	1, 636, 875
	<hr/>
Total .....	11, 903, 281



## DEPARTMENT OF GEOLOGY

(R. S. BASSLER, *Head Curator*)

Encouraging progress in the care and preservation of the ever-increasing geological collections was made during the past year, and researches show favorable advancement in all divisions of the department. The additions of the year maintained a high standard scientifically—indeed, the geological collections are now in such condition that, in most cases, quality is more to be sought than quantity.

Field expeditions continue to furnish the most valuable accessions. The Chilean minerals obtained by Mark C. Bandy, the Devonian invertebrates collected in the Mississippi Valley and Michigan by Assistant Curator G. A. Cooper, and the mammalian and reptilian fossils acquired by Curator C. W. Gilmore in Montana and Wyoming are all of outstanding merit.

The death on April 23, 1936, of Dr. August F. Foerste, associate in paleontology, one of America's foremost paleontologists and a generous friend and contributor to the Museum, is a great blow to the department. Dr. Foerste's store of information, resulting from his long experience in geology and paleontology, was always at the service of the staff. His lifelong scientific activities happily resulted in many publications on Paleozoic fossils and stratigraphy and in a great collection of type specimens that he presented to the National Museum.

### ACCESSIONS

The accessions number 231, with an estimated total of 213,024 specimens. By divisions, these are as follows: Mineralogy and petrology, 94 accessions (828 specimens); geology, systematic and applied, 19 accessions (341 specimens); stratigraphic paleontology, 97 accessions (211,575 specimens); vertebrate paleontology, 21 accessions (280 specimens). Although there were fewer accessions than last year, there was a marked increase in number of specimens of unusual scientific interest.

In mineralogy important acquisitions were obtained, as usual, through the income from the several funds available to the division. Outstanding is the collection of Chilean minerals made for the Canfield collection by Mr. Bandy. This included many fine rare specimens such as proustite, argentite, native silver, numerous sulphates of iron and copper, nitrates, and other minerals characteristic of dry climates. Researches to date have yielded six new mineral species in this material. A series of minerals from Amelia, Va., particularly those of the rare elements, also obtained for the Canfield collection,

are noteworthy. Individual specimens of especial merit added to this collection include a remarkably flawless etched crystal of aquamarine beryl from Brazil; a large topaz crystal from California; a fine large group of azurite crystals in parallel growth from Arizona; two small fossil spruce cones changed to precious opal, from Nevada; a large transparent cerussite crystal from Tsumeb, Southwest Africa; a rich specimen of the gold telluride, sylvanite, from West Australia; and six specimens of crystallized uraninite from North Carolina.

By purchase from the famous Karabacek collection at Vienna, the Roebling collection acquired among many excellent mineral specimens, fine azurites and malachites from Tsumeb, already mentioned; an unusually large and perfect crystal of the titanium oxide, brookite, from Austria; a fine group of the rare calcium antimonate, atopite, from Brazil; a rare specimen of crystallized dufrenite (iron phosphate), from England; and several excellent apatite crystals from Germany.

Capt. Robert A. Bartlett obtained for the Roebling collection from a new find on Disco Island, Greenland, an excellent series of native iron and associated minerals in basalt, interesting on account of their similarity to meteorites and weighing almost half a ton. Other exceptional specimens are a rich-colored ruby crystal in matrix, weighing about 70 carats, from Burma; a large nugget of beautifully colored turquoise and a striking group of stibnite crystals from Nevada; and a large crystallized specimen of enargite from Butte, Mont.

Valuable minerals donated to the general series are as follows: An unusually large, fine cassiterite crystal from Seward Peninsula, presented by Duncan McLean through Dr. Philip S. Smith, of the United States Geological Survey; an exhibition group of stibnite from Rumania, gift of British Consul General Hugh A. Ford, Boston; two interesting examples of native iron, presented by Dr. Martin Porsild, of Copenhagen, Denmark; a rich specimen of pitchblende from Hottah Lake, Canada, presented by Irvin E. Behrman, of New York; polished specimens of an unusual red serpentine received from W. H. McClelland, Tuckahoe, N. Y.; and an unusually coarse, platy, complex silicate, ganophyllite, from L. H. Bauer, Franklin, N. J. Other gifts comprise: Cerargyrite from Miss Alice W. Barlow, San Diego, Calif.; piedmontite and thulite from Prof. V. P. Gianella, Reno, Nev.; halotrichite from John J. S. Shrader, Freeland, Pa.; Mexican cuprotungstite from B. S. Wilson, Tieson, Ariz.; and three polished California blue agates from William Cox Buehler.

Exchanges worthy of special mention consist of fine malachite, anglesite, cerussite, and other minerals from Southwest Africa, received from Martin L. Ehrmann, New York City; large crystals of



the rare sulfohalite, apthitalite, and other saline salts from Searles and Borax Lakes, from M. Vonsen, Petaluma, Calif.; several rich examples of the rare aluminum phosphate, augelite, from California, from Champion Sillimanite, Inc., Laws, Calif.; and several specimens of the iron manganese mineral pyroxmangite from South Carolina, from George L. English, Rochester, N. Y.

New species or varieties added during the year are: Austinite from Utah; jelletite and hydroxylapatite from Switzerland; chileloeweite, lindgrenite, and six undescribed species in the Chilean material collected by Mr. Bandy; and two new species in the exchange received from Mr. Vonsen.

A set of minerals from Amelia, Va., described by Miss Jewell J. Glass, was transferred by the United States Geological Survey.

A pale, wine-colored cut topaz, weighing  $43\frac{1}{2}$  carats, and a brown cut tourmaline, weighing  $17\frac{3}{4}$  carats and showing unusually strong pleochroism, were added to the Isaac Lea collection of gems through the Frances Lea Chamberlain fund.

Additions to the meteorite collection continued in favorable number, mainly through purchases by the Roebling fund. Outstanding is an iron mass of 398 pounds, reported to be the largest individual of the Henbury, Australia, fall yet found. Examples of other falls new to the collection are: Phillips County, Colo., 250 grams; Morland, Kans., 298 grams; Hugoton, Kans., 2,500 grams; Oberlin, Kans., 195 grams; Seneca, Kans., 260 grams; Pleasanton, Kans., 201 grams; Clareton, Wyo., 147 grams; Albin, Wyo., 3,170 grams; Norfolk, Ark., 73 grams; and a complete individual from Farmville, N. C., 5,850 grams. The Geological Survey of Southern Rhodesia, through its director, presented a 20-gram fragment of the Mangwendi stony meteorite from that country, and through exchange A. R. Allen, Trinidad, Colo., added a slice of the Roy, N. Mex., no. 2, meteorite weighing 503 grams, and a slice of 645 grams of the Cerros del Buei Muerto, Chile. The total number of distinct meteorite representatives now in the collection is 606.

The most important accession to the petrological collection is a series of anorthosites, interesting rock types, from Norway, gift of Dr. Tom F. W. Barth, of Washington, D. C.

Among the notable additions to the economic collections are: A series of tungsten (scheelite) ores from Kramat Pulai, Ltd., Federated Malay States; a large mass of silver ore, gift of the Sunshine Mining Co., of Mullan, Idaho; mercury ores from Mexico, collected by Frank L. Hess; and an exhibition specimen illustrating the occurrence of abrasive garnet in the form of a large garnet crystal in a block of basic igneous rock, donated by Frank C. Hooper, Barton Mines Corporation, North Creek, N. Y. Through the Royal Ontario Museum

were added for the exhibits some large masses of ores from Canadian districts, while the collections made by Mr. Bandy in Chile include a series of selected nitrate ores from various localities in the Atacama desert.

The United States Geological Survey transferred a collection of rocks and ores illustrating the geology of the Magdalena mining district, in Socorro County, N. Mex., now under description by members of their staff.

The most valuable accession in the division of stratigraphic paleontology is an exchange from Colgate University, the result of five years' collecting by Dr. G. A. Cooper while a student at Colgate and Yale Universities. These fossils, especially rich in Mollusca and totaling at least 100,000 specimens, illustrate the faunas of all parts of the middle Devonian (Hamilton) group in its range from Lake Erie to Unadilla Valley, N. Y., a distance of about 200 miles.

Next in importance should be mentioned the collections made by Dr. Cooper, accompanied by Prof. A. S. Warthin, of Vassar College, and Preston E. Cloud, in a field study of the Middle Paleozoic rocks of Indiana, Illinois, Iowa, and Michigan. Here again about 100,000 specimens, especially from Middle and Upper Devonian rocks, were obtained, valuable not only for the biologic and stratigraphic study series but also for much needed additions to the depleted duplicate sets.

An excellent collection of Jurassic invertebrates from Chile is a noteworthy gift from Mr. Bandy. These specimens are mostly silicified, making it possible to dissolve away the matrix and thus reveal the internal structure.

Among the exchanges are extensive series of Permian mollusks and echinoderms from the classic East Indies area, the island of Timor, received from the Geological Institute of the University of Amsterdam; a fine set of Ordovician trilobites from Portugal, from J. T. Wattison; and a collection of Carboniferous fossils from Oklahoma, from Clarence Foster of Bacone College.

The United States Geological Survey transferred seven lots of invertebrate fossils among which is one of 1,000 specimens (100 species) from the Miocene, Choctawhatchee formation of Florida; another of 336 specimens from the Pleistocene of Oahu, Hawaii.

The paleobotanical collections were enriched by rare types of fossil cones, from the Cretaceous of Maryland and the Eocene of North Dakota, and figured specimens of Eocene and Miocene plants from the Northwestern States, all described by Dr. R. W. Brown, the first being a gift from Dr. Brown and the others transferred by the United States Geological Survey. A petrified palm log from Natchitoches, La., presented by Dr. J. R. Swanton, of the Bureau of American Ethnology, is a valued addition to the exhibition series.



The field expedition in vertebrate paleontology, in charge of the curator, yielded material of first importance to that division, benefiting both the mammalian and reptilian series. The outstanding discovery of the summer was a nearly complete articulated skeleton of the mammal *Coryphodon*, a rare find since so far as known only one other such specimen has ever come to light. In addition, the Wasatch formation of Wyoming yielded a number of skulls, jaws, and parts of skeletons, much needed to round out the Eocene study series. Explorations in the Two Medicine formation in Montana resulted in the acquisition of articulated tails and other parts of the little-known dinosaur *Procheniosaurus*; two fragmentary specimens of *Leptoceratops*, recording the first recognizable remains of this animal discovered in these strata; an adult skull of *Brachyceratops*; and skeletal parts of other horned and armored dinosaurs. Well-preserved turtle specimens were also obtained.

An articulated, almost complete skeleton of the interesting South American mammal *Scarittia canquelensis*, obtained by purchase, furnishes an outstanding exhibition mount.

A skull and lower jaws of a large phytosaurian reptile from the Triassic of Arizona came (through the Smithsonian Institution) from M. V. Walker, and through exchanges the division acquired specimens of exceptional merit, namely, a nearly complete skeleton of an edentate mammal, *Scelidodon capellini*, from South America, obtained from the Field Museum of Natural History, and the only known complete skull of the Oligocene lizard, *Glyptosaurus giganteus*, received from George F. Sternberg.

As in previous years, Johns Hopkins University deposited a number of fossil vertebrates of which the following are types: A new species of *Sula* (bird) from the Miocene of Maryland, *Peritresius virginianus* (turtle), and *Pelycorhamphus pertortus* and *Prepotherrium venezuelanus* (mammals).

The Geological Survey transmitted various fossil fishes, several of which were type specimens, and the Paleontologisk Museum, Oslo, Norway, forwarded a collection of Downtonian fishes from Spitsbergen as the first part due us in return for financial aid advanced some years ago by the Smithsonian Institution to the late Prof. Johan Kiaer for explorations on that island.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

Relabeling of the mineralogical exhibits begun last year was continued, with the result that all the remaining exhibits, particularly the choice large specimens of most interest to the public, were supplied with new, more readable labels. Two new cases were installed with showy examples of the calcite family. Special exhibits in the gem

and other collections were rearranged in more logical position and with a view to maintaining the open effect of installation favored throughout the department.

The most important and time-consuming piece of work undertaken by Curator W. F. Foshag was the sorting, identifying, and cataloging of the Henry S. Washington collection of rocks. In order to identify properly the sets of analyzed rocks, which give great value to this collection, it was necessary to study and check practically all the many works on petrology published by Dr. Washington. In addition, the minerals collected in Chile by Mr. Bandy were identified and sorted in order to make possible a division with Harvard University, under whose joint auspices the collecting was financed.

A long but important piece of work occupying most of Assistant Curator E. P. Henderson's time was the cleaning, expanding, and relabeling of the study series of minerals, exclusive of the Roebling and Canfield collections, which are still held as separate units. This series as now expanded occupies approximately 650 standard drawers.

The preparation of an extensive paper dealing with the *Trepostomata*, or stony bryozoans, made the rearrangement and expansion of this part of the study series advisable, a work undertaken by the head curator, involving the partial preparation, identification, and relabeling of the contents of about 200 standard drawers. The photographic illustration of some hundreds of thin sections of many new species needed for this paper were prepared under his direction, with the aid of a grant from the Geological Society of America. The many thin sections accumulated in the course of the study were mounted, cataloged, and added to the section series. Similarly his study of the peculiar cystids (*Edrioasteroidea*) in the Springer collection led to a revision of the entire echinoderm exhibits, wherein the cases containing echinoids, asteroids, and cystids were completed, and the crinoids were rearranged so as to allow the installation of better and more instructive material. The head curator has also, as planned, identified various large collections of Ordovician and Silurian fossils and has built up the study series of fossil jellyfishes, sunflower corals, graptolites, and other smaller but important groups. He assembled and installed in a new wall case in the paleobotanical hall a series illustrating the most primitive forms of fossil plants representing the earliest life of the globe.

The limited number of the regular staff has made it necessary from time to time to store many boxes of rocks and fossils for future study, but the assistance furnished in the past two years by the several relief organizations has permitted the unpacking and proper arrangement of all such specimens. No material now remains in storage in the attic, and the collections throughout the department are available for



reference. The new materials thus available are reflected in the exhibition series, where it was found possible to make marked improvement by rearrangement and the introduction of choice new specimens in several of the halls.

Dr. G. A. Cooper, assistant curator of stratigraphic paleontology, devoted himself chiefly to the identification and distribution of his extensive field collections, particularly from Michigan, which, combined with those assembled by E. R. Pohl some years ago, make up a very complete stratigraphic series. In addition, Dr. Cooper identified a considerable number of Devonian and Carboniferous fossils and distributed in the biologic series much unplaced and newly acquired material. He has also continued the etching of fossils from blocks of Ordovician limestone collected in the valley of Virginia, through which process the most unique material of its kind has been added to the trilobite, brachiopod, and other series.

Certain groups of the biologic series were overhauled, cleaned, and supplied with new labels; and the preparation of the several bibliographic catalogs or indices was continued.

Dr. Paul Bartsch, in charge of the Cenozoic invertebrates, reports that as a result of aid furnished by the Federal relief agencies the cataloging and other records were considerably advanced. Dr. Mary J. Rathbun, assisted by members of the staff in marine invertebrates, ably cared for the fossil crab collection.

Miss Margaret Moodey, aid, in continuation of her work on the Springer collection of echinoderms, found it necessary to expand parts of the collection, owing to the introduction of new material. She prepared a card catalog of the collection, including all the Museum's specimens that have long been incorporated in the Springer collection. Bibliographic work was continued, and faunal lists of the Paleozoic forms are now in preparation. The echinoderm library was rearranged, and a card catalog of its contents is in progress.

Preston Cloud was employed part time under the Springer fund to assist in preparatory work on the collection and in assembling and distributing specimens previously segregated.

A skeleton of a rare mammal, *Moropus elatus*, from the Miocene of western Nebraska, prepared and mounted by T. J. Horne, and a skeletal group of the extinct peccary *Platygonus* from the Pliocene of Idaho, mounted by N. H. Boss, are the important additions to the fossil vertebrate exhibits. Retained in the matrix in the position found, the latter exhibit furnishes a graphic illustration of the manner in which these animals were entombed.

The energies of the laboratory force were concentrated during the early part of the year on the preparation of the 1934 collection of the horse (*Plesippus*) remains from Idaho, with the result that the essen-

tial part of this collection has now been prepared, assorted, and placed in the study series. Later, some months were devoted to the preparation and mounting of certain parts of a dinosaur skeleton that forms the nucleus of the exhibit at the Texas Centennial Exposition at Dallas. A beginning was made on the preparation of the Montana collection resulting from the field season of 1935.

Dr. C. L. Gazin, assistant curator of vertebrate paleontology, continued the arrangement and cataloging of the fossil mammals, chiefly late Pliocene collections from Hagerman and Pleistocene from American Falls, Idaho. Oligocene collections from Pipestone Springs, Mont., were arranged and partly classified, and a beginning was made on similar treatment of Eocene collections from Wyoming. Pleistocene material from Florida also was sorted, arranged, and partly cataloged.

#### INVESTIGATION AND RESEARCH

Within the year Dr. R. S. Bassler, head curator, prepared for publication an article on "Concretions, Freaks in Stone"; a monograph on the Paleocyclidae, a family of Paleozoic corals; and an article entitled "Nomenclatorial and Other Notes on Fossil and Recent Bryozoa." Also he practically finished a monographic study of a new order of Bryozoa and his studies on stony Bryozoa.

Dr. W. F. Foshag, curator of physical and chemical geology, continued his studies on newly received material relating to borax deposits, especially a new occurrence of sodium bicarbonate from Searles Lake and several undescribed species from Borax Lake, Calif. The mineral nahcolite from Italy was also investigated in this connection, and two new chlorides of copper from Chile were analyzed.

E. P. Henderson, assistant curator of physical and chemical geology, carried on some additional investigations on two meteorites, Moore County and Farmville, from North Carolina. Several analyses of sulphates of iron, collected by Mark C. Bandy in Chile, yielded new information on this group of minerals and brought to light several new species.

Dr. C. E. Resser, curator of stratigraphic paleontology, completed a nomenclatorial paper on Cambrian trilobites, prepared a brief paper on the conocoryphid trilobites in the National Museum, and re-described Billings' Lower Cambrian types from Labrador and Vermont. He also continued work on manuscripts dealing with the Cambrian of the southern Appalachians and a résumé of the Cambrian of eastern Asia.

Dr. G. A. Cooper, assistant curator of stratigraphic paleontology, completed his Cambrian-Ozarkian memoir, describing 325 species of brachiopods. He also began researches on Devonian brachiopods and



presented a summary report of his findings before the Geological Society of America at its meeting in December.

Dr. E. O. Ulrich, associate in paleontology, was occupied in a detailed study of the paleontology and stratigraphy of the Cambrian rocks of the Upper Mississippi Valley, in the course of which he identified many of the collections from that area.

Until his death in April, Dr. A. F. Foerste was continuously engaged on his researches on the Cephalopoda, completing and publishing several papers within the year. Dr. T. W. Stanton, retired from active duty in the Geological Survey, resumed his researches on the Lower Cretaceous invertebrate collections.

C. W. Gilmore, curator of vertebrate paleontology, completed his monographic study of the fossil snakes and transmitted his manuscript to the Geological Society of America; he also finished a short paper on the dinosaurian genus *Troödon* for publication by the Carnegie Museum. Study of the fossil lizards in the Museum is under way, and a beginning was made on the reptilian collections from the Two Medicine formation. The fossils resulting from three expeditions to this area will form the basis of this study.

Dr. C. Lewis Gazin, assistant curator of vertebrate paleontology, completed his study of fossil horse remains from Idaho, on which he spent most of his research time during the year. In addition, he made studies of a new form of mustelid carnivore from the Neocene of northwestern Nebraska and of a taeniodont skull from the lower Eocene of Wyoming.

Mark C. Bandy, collaborating with E. P. Henderson, spent several months in the identification and investigation of the minerals collected in Chile. Laboratory facilities were extended also to many other outside investigators and cooperators in furtherance of their particular geologic studies.

Members of the Federal Geological Survey staff located in the Museum Building were steadily engaged in researches on the various collections of fossil invertebrates and plants. It is only in this way that our material can receive the attention it deserves, since the Museum staff cannot cover a field so broad. Of particular interest are investigations carried on by Dr. R. W. Brown, paleobotanist, who described some perfect lignitized cones found in the Lower Cretaceous rocks near Washington, D. C. Near the close of the year he completed and sent to press a description of fossil plants from Northwestern United States, as well as his joint study with Dr. Charles Read of the fossil fern *Tempskya*. Dr. Read completed the second part of his studies of the flora of the Devonian black shale of Kentucky and continued editorial work on a manuscript dealing with the Coal Measures (Pottsville) plants of Illinois, left

by the late David White. Dr. John B. Reeside, Jr., continued his researches on Cretaceous paleontology. Dr. Lloyd Henbest, jointly with Prof. Carl Dunbar, of Yale University, nearly completed a monograph on the Fusulinidae of Illinois, and Dr. L. W. Stephenson finished his study of the Cretaceous (Navarro) fauna of Texas. Dr. Josiah Bridge completed a study of Roemer's Texas types, borrowed from the University of Bonn, and also his work on the correlation of the Upper Cambrian of Missouri and Texas with that of the Upper Mississippi Valley.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

Geological specimens were distributed as follows: Gifts, 1,627 specimens; exchanges, 3,222 specimens; loans for study, 212 specimens.

#### NUMBER OF SPECIMENS UNDER DEPARTMENT

The estimated total of specimens in the department is as follows:

Mineralogy and petrology-----	146, 638
Geology, systematic and applied-----	96, 611
Stratigraphic paleontology-----	2, 128, 682
Vertebrate paleontology-----	28, 076
Total-----	<hr/> 2, 400, 007



## DEPARTMENT OF ARTS AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

The recent series of international expositions, beginning in Chicago in 1933 with the Century of Progress Exposition, has had a definite effect on the work of the larger units of the department of arts and industries. The suddenly aroused "exhibits consciousness" of industrialists throughout the country found the department cramped for exhibition space, so that it could not accept a number of proffered collections at the close of the Exposition. This was most disappointing to the department as well as to many potential patrons who appreciate the first-rank position of the National Museum in the field of technical museums.

Since then, owing largely to the surprising success of each subsequent exposition, industry has been directing its energies and resources toward temporary rather than permanent museum types of exhibits. The department accordingly has experienced a lessening of industrial cooperation and has few prospects of increasing it.

In addition to his regular duties during the year, Carl W. Mitman, head curator, served as contact officer for the Smithsonian Institution in connection with Federal exhibits at three expositions—the California Pacific International Exposition at San Diego, the Texas Centennial Exposition at Dallas, and the Great Lakes Exposition at Cleveland. His duties involved the selection, design, and execution of the Smithsonian's exhibits at these three expositions, which were still in progress at the close of the year.

No additions or changes in the department's staff occurred during the year. Sixteen relief workers, under the F. E. R. A. and W. P. A., were employed at various times, six of whom were on duty at the close of the year.

### ACCESSIONS

The number of accessions—248—was 17 more than for the previous year. These comprised a total of 2,281 specimens, about 1,600 less than last year. This decrease and that of two years ago clearly indicate the acute situation faced by the department in the matter of exhibition and storage facilities, necessitating among other things the refusal of many valuable specimens. The specimens received this year were distributed as follows: Engineering, 501; textiles, 675; organic chemistry, 16; wood technology, 149; history of agriculture, 4; medicine, 107; graphic arts, including photography, 829.

*Engineering.*—Of the 71 accessions received in the division of engineering, 37 pertained to aeronautics, 29 to mechanical technology, and 5 to mineral technology.

An outstanding accession in aeronautics was the Lockheed Vega airplane *Winnie Mae*, purchased in 1930 by F. C. Hall of Oklahoma City and flown around the world in 1931 by Wiley Post and Harold Gatty in 8 days 15 hours 57 minutes, and again in 1933 by Wiley Post, alone, in 7 days 18 hours 49 minutes. In 1934 and 1935, Post used the plane for flight tests at altitudes of about 35,000 feet, demonstrating that high speeds were attainable in the substratosphere and incidentally making a record flight, from Los Angeles to Cleveland, at an average speed of 340 miles an hour. The accession includes the Sperry robot pilot used on the second around-the-world flight, the controllable pitch propeller, and high altitude clothing. By act of Congress approved by the President on August 24, 1935 (Public Act No. 316—74th Congress), the Smithsonian Institution was directed to purchase this plane and its equipment on behalf of the United States and to place them in our collections. Pending the completion of these negotiations the plane and its accessories were placed here as a loan by Mrs. Post. The First Deficiency Appropriation Act, fiscal year 1936, made \$25,000 available for this purchase.

A second acquisition of high importance was the Northrop airplane *Polar Star* used by Lincoln Ellsworth in the first flight across Antarctica in November and December 1935 under auspices of the National Geographic Society, which was received as a gift from Mr. Ellsworth. This plane is a veteran of two previous Antarctic flights in 1934 and 1935. In the flight of 1935 from Dundee Island to the vicinity of Little America, a distance of 2,300 miles, the plane was landed and successfully taken-off five times. It is exhibited with the original ski landing gear for landing on snow and ice. Herbert Hollick-Kenyon was the pilot on the flights in 1935. The plane is an outstanding example of modern development in the all-metal, smooth-skin type of design and is the first of its kind to come to our collections.

The Menasco Manufacturing Co. of Los Angeles presented a cut-away engine of its 4-cylinder, in-line, air-cooled type. The engine represents the return to the in-line type of engines, particularly for light planes, after the trend from the early water-cooled, in-line engines to the air-cooled radial designs.

To the propeller collection there was added as a gift of the Fairey Aviation Co., England, a wide-blade, steel propeller of the type used on the Supermarine S-6, which won the Schneider Cup Races of 1931 for England with a speed of 371 miles an hour and later set a world record of 417 miles an hour. From the Navy Department were transferred a 3-blade propeller and gear from the airship *Macon* and a 2-blade propeller from the airship *Akron*.

The collection of scale models of aircraft was increased by 14 specimens. These include the Short Brothers' airplane of 1911, thought to



be the first multiengined plane to fly, presented by the Short Bros., Ltd., England; the Bréguet sesquiplane, *Point d'Interrogation*, flown by Coste and Bellonte from Paris to New York in 1930, presented by Ateliers d'Aviation Louis Bréguet, Paris, France; the first airplane built by Glenn Martin in 1909 presented by Mr. Martin; a VE-7 presented by the Chance Vought Aircraft, and the *Baby Clipper* by the Fairchild Aircraft Corporation. Other excellent and important models received were a Packard-LePere made and presented by Paul R. Robertson, of College Park, Md., and a Grumman fighter, the gift of the designer.

The collection of historic relics in aeronautics was augmented by the gift from Glenn Martin of a parachute used by him in 1913. It embodied a jacket worn by the flier, and was released by a cord which, being attached to the airplane structure, pulled the chute out of the bag as the flier jumped.

The National Geographic Society presented a sun compass used by Admiral Byrd in airplane flights in Antarctica. This compass, constructed specially for use in the Southern Hemisphere, is of the type invented by Arthur H. Bumsted, of the National Geographic Society, and used on various arctic flights. Col. Charles Lindbergh located and had delivered to the Museum the original wheels of the *Spirit of St. Louis*, and the B. F. Goodrich Co. presented four tires that were used on the *Winnie Mae*.

The National Geographic Society also presented pieces of the fabric from the balloon *Explorer II* in which Capt. Albert W. Stevens and Orville A. Anderson established the altitude record of 72,395 feet on November 11, 1935. It is interesting to contrast this with the Wanamaker Trophy, awarded to Miss Matilde Moisant in 1911 for an altitude record of 4,000 feet, which was presented by her to the Museum during the year. Mrs. Vermadilla Moisant and Mrs. J. F. Smith presented records and photographs illustrating the work of the pioneer airmen John Moisant and Art Smith.

The most important single item accessioned in mechanical technology was the original locomotive *Atlantic*, built for the Baltimore & Ohio Railroad at Baltimore in 1832 by Phineas Davis, York, Pa., watchmaker. This engine was acquired by the Museum for a temporary display from August 1935 to January 1936 to celebrate the one-hundredth anniversary of the entrance of the railroad into Washington City. The *Atlantic* was the first locomotive to enter the National Capital, having come to Washington on the day before the formal opening to take President Andrew Jackson and his cabinet to the ceremony at the boundary on August 25, 1835. The locomotive is cleverly motorized so that it operates slowly, its vertical piston and connecting-rods making an impressive show. A full-size reproduction of an Imlay passenger coach of 1835 was displayed with the locomotive.

tive. Upon the termination of the display the Baltimore & Ohio Railroad Co. agreed to leave the locomotive and coach in the Museum upon deposit, subject to temporary recall for use at important expositions and railroad shows. Another important railroad accession was a set of detailed photographs and blueprints of the full-size reproduction of the locomotive *Stourbridge Lion*, the first to run in the United States in commercial service. These specimens were prepared and presented by the Delaware & Hudson Co. in 1932-1933 from data obtained largely from the original relics of the locomotive preserved in the Museum. The New York Chapter of the Railway and Locomotive Historical Society, Inc., presented an excellent photograph of a miniature portrait of Horatio Allen, who purchased and first operated the *Stourbridge Lion* for the Delaware & Hudson Co. in 1829. The original miniature was painted by D'Aubigny at Paris in 1835.

In the field of highway transportation, a Ford model-T touring car of 1913 presented by Harvey Carlton Locke proved the most popular accession of the year. This car, purchased by the donor's father and used for more than 20 years, is in fine condition and an excellent representative of the history-making model-T Ford. A contrasting specimen is a rough-lock, an iron sledlike device to chain beneath one rear wheel of a wagon to cause it to follow in the track of the front wheel and so prevent the wagon from skidding sideways on ice and snow. This was presented by T. Lamar Jackson. Mrs. David Lawrence loaned a small, machine-made, one-passenger jinrickisha. A model of an ingenious form of horse-drawn road scraper of about 1894 was presented by E. W. Heiss. It is a 3-scoop scraper designed so that the scoops were lowered and filled successively.

Among the several models added to the watercraft collection two were received from President Roosevelt, through his interest in ship prints and models. One of these, the R. M. S. *Mauretania*, was received at the Museum on the very day that the ship itself was delivered to the shipbreakers at the end of an unparalleled career of nearly 30 years in the front rank of Atlantic liners. R. E. Copley, who initiated the original gift of the model of the *Mauretania* by the Cunard Steamship Co., Ltd., to the President, presented a souvenir of the vessel in the form of a cigarette box made from the interior oak trim of the ship. The other model, lent by President Roosevelt, is a large, finely executed model of a modern sea-going trading junk of the island of Hainan, China. This model was presented to the President by Tse-Vung Soong, member of the National Council of China, whose family resided for generations on Hainan. It was carefully made under the direction of Mr. Soong, who wished to preserve the record of the Hainan junk of which it is thought that few will be built in the future.



Capt. John B. Harrison, well-known designer and builder of boats at Tighlman, Md., presented two models of Chesapeake Bay vessels. One of these is the original half model of the bugeye *Triumph*, designed and built by Captain Harrison in 1893 and one of the fastest and most successful of the type. The other model is of the type of dead-rise motor cargo boat common on Chesapeake Bay today. George B. Shillingsburg presented two designers' half models of present-day New Jersey oyster schooners, not heretofore represented in the watercraft collection.

One unique accession, indicative of the scope of the watercraft collection, in addition to being of great interest in itself, is the single racing shell in which Edward (Ned) Hanlan Ten Eyck won the "Diamond Sculls" of the Henley Royal Regatta in 1897, the first American to win the English rowing classic. The shell was presented by his father, James A. Ten Eyck, dean of American rowing coaches.

To the collection of sailmakers' tools, Mrs. Mary R. Roberts and Mrs. Anne J. DePue (of the Museum staff) added a copy of "The Art of Sailmaking", published in 1862, written in part by an uncle of the donors, and used by their father, whose kit supplied the collection to which it is added.

The collection of typewriters, which is grouped with the communications collections, was increased by important gifts of old and new models of machines from Remington-Rand, Inc., and the Royal Typewriter Co., through T. M. Ralph and George H. Palmer, respectively, to whom the Museum is indebted for their continuing interest.

The electrical communications items added during the year include an example of the pendulum vibrating telegraph key known familiarly to telegraphers as the "bug" and possibly destined to be the last manually operated telegraph sending instrument. The one acquired is a Vibroplex key, the gift of the Western Union Telegraph Co. A. M. Stevens presented a group of early radio elements used in experimental work about 1911 to 1914, including an audio-frequency transformer said to be one of the first two used by Dr. Lee de Forest. An entire broadcast transmitter, from the 50-watt station WDM, one of the first stations licensed for broadcasting in Washington, D. C., used to broadcast church functions from the Church of the Covenant, was acquired. This is a good example of an early broadcasting station, made of parts purchased separately and mounted on a table, at a time when assembled transmitters were not generally available within the means of small stations.

The Board of Education of the District of Columbia transferred to the Museum a master clock and two repeating clocks of an interesting old pneumatic system, manufactured by A. Hahl & Co., Baltimore. The clock movement operates bellows made of oil-sealed glass

bells, which send periodic "puffs" of compressed air to the repeating clocks. Each puff, spaced a minute apart, acts on a piston in a cylinder of the repeating clock, which is connected to the hands so as to move them ahead one minute.

An Audiffren refrigerating machine, transferred from the United States Department of Agriculture where it was used in the laboratory of the Bureau of Plant Industry for about 20 years from 1914, was added to the machinery and power collections. This is one of the earliest hermetically sealed refrigerating machines, all parts being contained within two ball-shaped chambers attached to a hollow shaft, all revolving together. It was invented by the Abbé Audiffren in France about 1904 and introduced into the United States in 1911.

A fuel injection system for a 4-cylinder Diesel engine was presented by the United American Bosch Corporation. The specimen is sectioned to show the throttling pistons of the fuel pumps, the governing and timing mechanisms, and the injection nozzles, and is hand operated.

An interesting group of early American fire relics was received from the Insurance Co. of North America. These were assembled with the old fire engines in the Museum to form a special temporary display which is proving very popular. The exhibit includes a hand-pumping engine built and used at Salem, Mass., before 1800, an ornate hose reel and parade wagon of 1838, and a quantity of smaller items including prints, buckets, hats, torches, models, and fire marks.

An interesting accession in mineral technology is that of two pigs of iron from the vicinity of Spottswood Furnace, established by Gov. Alexander Spottswood near Fredericksburg, Va., before 1800. These were received from Judge Alvin T. Embry, Fredericksburg, whose land includes the site of the old furnace. The Carborundum Co., Niagara Falls, N. Y., presented a miniature scale model of a kiln for firing carborundum grinding wheels, for the exhibit of models and materials illustrating the manufacture of important carborundum products. The Joseph Dixon Crucible Co. presented new material illustrating the manufacture of natural graphite products.

*Textiles, organic chemistry, wood technology, history of agriculture, and medicine.*—The 951 specimens added to the collections of these five divisions and sections were contained in 91 accessions, 2 of which were joint accessions with other departments.

The largest single accession received by the division of textiles was that from the American Thread Co., Philadelphia, Pa. This consists of a series of 404 specimens showing 20 types of cotton threads for domestic and industrial purposes and 26 different forms of "put-ups" in which these threads are marketed. The series was donated by the company to replace a similar series presented 20 years ago. From the



Bigelow-Sanford Carpet Co., New York, there was received a valuable series of 29 specimens of carpets and rugs dating from 1869, which together with 26 mounted photographs visualize the development of floor coverings and illustrate the accomplishments of Erastus B. Bigelow, one of America's outstanding inventors. Bigelow's invention of the power loom to weave ingrain carpets was based on his earlier invention in 1837 of a power loom to weave coach lace used for fancy trimmings and handholds in carriages. Alexander N. Cook, New York City, presented two fine examples of coach lace, one of them woven in the old Bigelow mill in Clinton, Mass.

Forty-eight small samples of curious and interesting old fabrics were presented for the study collection by Mrs. Julia Brenner, San Francisco, Calif. Included are European silks and velvets of the sixteenth and nineteenth centuries, and English, French, and American printed cottons and linens of the eighteenth and nineteenth centuries. The Cotton-Textile Institute, New York, contributed 73 specimens of the year's best cotton textiles of American manufacture, selected by a special committee of stylists and experts.

The Singer Sewing Machine Co., New York, added to its exhibit 5 chromium-plated "fashion aid" attachments, 12 specimens of fancy stitching done with these attachments, and 7 specimens of plain stitching done with the regular attachments. To the division's sewing-machine collection the most important addition was the original model for which Walter Hunt was granted U. S. Patent no. 11161 on June 27, 1854. The model was presented by Clinton N. Hunt, New York, great-grandson of the inventor, and takes a place with the other original patent models of sewing machines already in the collection.

The collection of early American homecraft textiles was augmented by 46 specimens. Mrs. Henry Clark Coe, Washington, D. C., added five samplers worked in cross-stitch on wool and on linen, one of which gives a "Representation of Solomon's Temple." A wonderful example of needlework received was an all-white reversible, quilted counterpane, or "stuffed work" quilt, made in 1850 at Atlanta, Ga., by Mrs. Fielding Travis Powell and presented by her daughter, Miss Ella May Powell, Washington, D. C. A linen-lined, homespun, cotton counterpane, with grape and Greek key designs in "stuffed work" and French knots, was lent by Mrs. William W. Townsend, Washington, D. C. The Misses Mary and Katherine Noyes, Takoma Park, Md., presented three important specimens consisting of an all-white quilted counterpane and two hand-woven wool blankets made by relatives between 1825 and 1840. A colorful silk quilt-top pieced by Eliza Jane Todd, in 1835, in a variegated hexagon block pattern, "Grandmother's Flower Garden", was presented by Mrs. Anna Perkins Stewart, Washington, D. C. Mrs. McCook Knox, Washington, D. C., lent a

bordered cotton applique quilt in leaf-cross pattern and half of a red, white, and blue double-woven coverlet in 4-block figure, both of which were made by relatives a hundred or more years ago. Mrs. Charlotte Pullen Scruton, Glen Ridge, N. J., presented a pieced cotton quilt of the period of the Civil War, made by her mother and 14 of her Sunday School pupils in Augusta, Maine, for the entertainment of soldiers confined in Union Army hospitals. Conundrums, quotations, etc., 3,675 words in all, are penned on the quilt. Miss Grace L. Temple, Washington, D. C., presented a hand-woven coverlet in an overshot pattern of "Sun, Moon, and Stars" and 15 pieces of early textile fabrics and examples of fine needlework. Additional coverlets were received as loans from the following persons: Mrs. Emma F. Streater, Mrs. Helen C. Cooley, Miss Alice Isabel McKenna, and R. P. Tolman, while Dr. Cooper Curtice, Fairfax, Va., and Miss Ruth M. Brenner, San Francisco, Calif., presented portions of coverlets made over 125 years ago. A linen damask napkin of patriotic design, commemorating American Independence, woven in Ireland especially for Samuel Chase, a signer of the Declaration of Independence, and used by him in his home at Annapolis, Md., was presented by Allan Browning Lane, Centerville, Md.

In the agricultural history collection four pieces of equipment were accessioned. The most important of these was a hillside plow, presented by the late Sir Henry S. Wellcome, London, England, and believed to have been used in New York State about 1800.

The Sponge & Chamois Institute, Washington, D. C., contributed nine specimens for addition to the collection of organic chemistry. These are indicative of the present-day trend to dye sponges in pastel shades to conform to the color effects in modern bathrooms and to trim them in the shape of various household brushes. Two ancient Spanish "botijas" or olive-oil jars were received as a gift from Maj. Felipe Munilla, military attaché of the Cuban Legation, and his wife, Señora Petra Fernandez Arenas de Munilla. In the days of the colonization period the convents and monasteries in Cuba received olive oil directly from Spain in pointed oval jars of this type. These jars were among a large number removed from the old Santa Clara Convent, built in 1644, when it was taken over by the Cuban Government to install the offices of the Habana Aqueduct and other branches of the Department of Public Works. The Bakelite Corporation, Bound Brook, N. J., and the Plaskon Co., Toledo, Ohio, each sent an additional specimen to be added to the extensive exhibits supplied in previous years. The first is a voltmeter in a Bakelite molded case containing specially mounted Bakelite insulating bushings and laminated washers, to demonstrate the application of the smallest pieces molded from Bakelite. The chief



interest in this specimen lies in the fact that tiny bushings used in electric meters were the first commercial application of Dr. Baeckeland's new molding materials. The second specimen was a case for a cautery-light transformer, molded in ivory "Plaskon", a urea-formaldehyde plastic. It illustrates the molding of complex forms with metallic inserts.

The most noteworthy accession in the section of wood technology was a set of 104 woods of the United States received as an exchange from the department of wood technology, New York State College of Forestry, Syracuse, N. Y. This accession forms part of a continuing project undertaken by this agency to collect commercial woods of the United States and Canada backed by herbarium material from the same tree. A second important accession consists of 12 samples of imported woods intercepted by inspectors of the division of foreign plant quarantines, United States Bureau of Entomology and Plant Quarantine, and transferred to the section. These will help to build up a reference collection of woods to include all the dissimilarities of structure and texture which in many species are so confusing. Two interesting specimens were transferred to the wood collection from the Soil Conservation Service. They are the bark and wood of shipmast locust, a recently published variety of *Robinia pseudoacacia*. For years woodsmen, farmers, and foresters have recognized differences within the species, not only morphologically but also in the durability of the varieties when used for posts, but until recently no one had studied this question from a scientific standpoint. The publication of this variety proves that there has been definite basis for the persistent claims of those who have had first-hand contact with the wood.

The most valuable addition to the division of medicine was a series of five dioramas illustrating important steps in the manufacture of medicinal cod-liver oil. The accession was the gift of E. L. Patch Co., Boston, Mass. The dioramas, ingeniously built in a revolving metal cylinder, depict the extraction, filtration, cold pressing, and storage on board the cod-fishing trawlers; the subsequent laboratory experimental work; commercial packaging of the oil; and finally the part played by cod-liver oil in health building.

The history of medicine section was enhanced by the gift of some interesting specimens of old spectacles from the Bausch & Lomb Optical Co., Rochester, N. Y. All are of American manufacture, ranging in date from 1820 to 1840, and illustrate types of mountings and lenses.

In the section of materia medica important medicinal materials were added, principally to represent augmentations to the Pharmacopœia of the United States, Eleventh Decennial Revision, which

became official June 1, 1936, and to replace deteriorated specimens. Specimens included were: Vegetable and chemical medicines from Merck & Co., Rahway, N. J.; Russian ergot from Dr. H. H. Rusby, Newark, N. J.; eucalyptol and essential oils from Fritzsche Bros., New York; thymol and essential oils from the Dodge & Olcott Co., Bayonne, N. J.; vegetable drugs from Peek & Velsor, New York; botanical drugs from the R. Hillier's Son Corporation, New York; chemical medicines from the National Aniline & Chemical Co., New York; chemical medicines from the Winthrop Chemical Co., New York; corn oil from the Corn Products Refining Co., Edgewater, N. J.; and extract of liver from Armour & Co., Chicago, Ill.

Donations to the section of public health included a person weighing scale with measuring rod, from the Toledo Scale Co., Toledo, Ohio; a strip film "Fight Cancer with Knowledge", from the American Society for the Control of Cancer, New York; the strip films "Balanced Diet" and "Care of the Child", from the Spencer Lens Co., Buffalo, N. Y.; and the strip films "Safe Housekeeping Practices" and "Safe Electrical Equipment in the Home", from the National Safety Council, Chicago, Ill. These films are used in the automatic delinescope of the division to supplement the permanent exhibits in the section.

*Graphic arts.*—In the division of graphic arts, which includes the section of photography, 60 accessions were recorded during the year. Of considerable importance was a small collection of four sketch-books and one portfolio of original drawings in pencil, pen and ink, and watercolor done by the eminent illustrator and artist, William Ladd Taylor (1854–1926). The collection was received as a bequest from the artist's wife, Mrs. Mary Alice Taylor. The Society of Motion Picture Engineers added valuable historical material to the motion-picture development series. Included in this loan accession was an Edison spool bank projector; four 50-foot loops of film and one reel of an early Biograph film. The spool bank projector was the first type devised by Edison about 1897 and followed his Peep Hole machine shown at the Chicago World's Fair in 1893.

Mrs. Ozias Dodge added 59 specimens to her earlier gift of materials relating to her late husband's experimental work and inventions in the field of photomechanical reproduction, and Dr. Lloyd P. Shippen loaned a very rare, original copper plate—an engraved portrait of Judge Joseph Hopper Nicholson (1770–1817) done by Charles B. J. F. de St. Memin (1770–1852).

A number of artistic prints were added to the division's permanent collections, including three etchings and a lithograph presented by Alfred Rudolph; six impressions from plates made by Mrs. Mildred B. Brooks for the Works Progress Administration and presented by



her; and a collection of 30 pictorial photographs—the work of Louis Fleckenstein and representative of his finest work in the last 29 years. This collection was donated by the artist.

Of more than passing interest was the gift of new samples of book-binding materials from the Holliston Mills; two sets of quoins or printers clamps from Alton B. Carty; a no. 3-B Quick Focus kodak and an old Blair camera from A. M. Venditti and Paul P. Walsh, respectively; and a fine miniature book “Bijou Illustrations of the Holy Land” from Thomas J. Shannon.

A fine example of color printing in five colors by offset lithography was presented by R. R. Donnelley & Sons Co., Chicago; from the Agfa-Ansco Corporation were received two Agfa color plates and two colorscopes for viewing them.

A most interesting gift relating to photography 60 years ago was that made by Mrs. W. A. Costain, Toronto, of two large dioramas of the city of Washington taken about 1875 by the donor's grandfather, Francis Hacker, Providence, R. I. The panoramas were taken from the tower of the Smithsonian Institution using negatives 16 by 20 inches in size. Each panorama is made up of three prints from three negatives.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

*Engineering.*—Several major changes in the use of exhibition space and a number of installations of large specimens were made during the year. The southeast range formerly occupied by communications collections is to be devoted to automobiles alone, and as a step toward this the communications material was worked over and a large part of it placed in storage. The remainder was moved to the southwest gallery and exhibited there in space obtained by storing a substantial part of the typewriter and calculating machine collections. The automobiles were then installed in the southeast range.

The airplane *Winnie Mae* was assembled under the direction of the assistant curator and hung in the northeast range. The weight of the specimen necessitated the construction of a suspension system independent of the roof members. The acquisition of the airplane *Polar Star* and its installation in the Aircraft Building involved the disassembling and removal of the all-metal airplane *Bremen*.

Engines and propellers of approximately the types of the originals were installed in the Caudron airplane suspended in the south hall, greatly improving the appearance of the installation. The DeHavilland-9, the flagplane of the Alaskan flight of 1920, was dismantled and prepared for shipment to the Army Aeronautical Museum at Dayton, Ohio. Revisions of labels, consolidation of exhibits, and

further work on the installation of the propeller and insignia series greatly improved the appearance of the Aircraft Building.

The original locomotive *Atlantic* and the reproduction of an Imlay passenger coach were installed in the east hall upon reproductions of short sections of two early types of railroad roadway. The locomotive was motorized, to run continuously during Museum hours. The removal of these two specimens for exhibition at the Great Lakes Exposition was also made during the year.

Some progress was made with the permanent plan for the storage of material that cannot be adequately or efficiently exhibited under existing conditions. The flood of the Potomac River and the possibility of its reaching the Museum cellar required an emergency evacuation of a large part of the division's storage space and seriously interrupted the orderly progress of the storage plan.

Work is about half completed on the systematic indexing of the large photograph file of the section of mechanical technology. This index, which is thoroughly cross-referenced, is designed particularly to aid strangers to the collections in locating required photographs without the help of the staff.

*Textiles, organic chemistry, wood technology, foods, and medicine.*—A total of 69 new installations and 80 rearrangements of older exhibits were made in the textile halls during the year. Much of this work came about as a result of the decision to devote more exhibition area to the division's rapidly growing and increasingly popular collections of American Homecraft Textiles (samplers, quilts, hand-made white goods, hand-woven wool coverlets, and similar materials). The decision was made upon the termination of the special exhibition of this collection, augmented with specimens from the divisions of history and ethnology, in the foyer of the Natural History Building during January 1936.

In the section of organic chemistry the new sponges and the new plastic specimens were installed and some reinstallations made in the rubber section. With the assistance of F. E. R. A. employees improvements were made in the appearance and labeling of the exhibits.

Three new exhibits were installed in the wood court this year. One shows the results of applying a new type of stain to pine wood, which penetrates the dense wood more deeply than the soft parts, the very opposite of the results obtained with ordinary stains. Another exhibit shows a further application of this process in the production of "New Art" picture panels. The third exhibit covers special uses of Flexwood veneer and was added to the series already being shown.

In the history of medicine section the exhibits were reinstalled to eliminate crowding. The magic, psychic, and surgical appliances



exhibits, formerly shown in a single case, were separated, as were also the collection illustrating the history of medicine in various countries.

In the sections of pharmacy and materia medica definite steps were taken to provide additional exhibition space by retiring portions of some collections, removing surplus stock packages, and eliminating duplication of material.

*Graphic arts.*—Two of the three large traveling exhibits, "How Prints Are Made", were completely remodeled and were shown 23 times during the year. The usual special monthly exhibitions instituted several years ago were continued. They were as follows:

#### GRAPHIC ARTS

Josephine McDevitt and Edith A. Wright: American lithographic music sheets; August and September 1935.

Ralph Fletcher Seymour: 52 etchings; October 7 to November 3, 1935.

R. Stephen Wright: 50 etchings and drypoints; November 4 to December 1, 1935.

Mahonri Young: 51 etchings and drypoints; December 2, 1935, to January 2, 1936.

Franz Geritz: 62 blockprints, etchings, and lithographs; January 3 to February 2, 1936.

Levon West: 55 etchings and drypoints; February 3 to March 2, 1936.

Mildred Bryant Brooks: 40 etchings and drypoints; March 3 to 29, 1936.

Albert Groll: 44 etchings and drypoints; March 30 to April 26, 1936.

Ruth Doris Swett: 25 drypoints; April 27 to May 24, 1936.

Alexandro Mastro-Valerio: 25 etchings, aquatints, and mezzotints; April 27 to May 24, 1936.

#### PHOTOGRAPHY

Washington Leica Club: 60 prints; July 1935.

Ben Glaha: 51 prints of Boulder Dam, Reclamation Service; August 1935.

F. R. Fraprie: 56 prints; September 1935.

Camera Club, New York City: 50 prints; October 1935.

H. K. Shigeta: 44 prints, through Fort Dearborn Camera Club; November 1935.

Fort Dearborn Camera Club: 51 prints; December 1935.

Louis Fleckenstein: 30 prints; January 1936.

Devereux Butcher: 51 prints of California missions; February 1936.

Telephone Camera Club, Washington, D. C.: 60 prints; March 1936.

George W. Harris: 52 prints, portraits of notables 30 years ago; April 1936.

#### INVESTIGATION AND RESEARCH

In general, research by staff members related to studies concerned with adequate and accurate exhibition data, with material desirable for the collections, and with preparation of exhibits. The curator of textiles, Dr. Frederick L. Lewton, continued his studies of the development of the sewing machine; Fred C. Reed, aid in engineering, investigated details of the Baltimore clipper schooner required for the construction of a model; and Dr. Charles Whitebread, associate curator of medicine, engaged in a study of the therapeutic classification of

pharmaceuticals in connection with the preparation of an exhibit. The assistant curator of wood technology, William N. Watkins, investigated the group characteristics of woods of various plant families and made microscopical examinations of undescribed woods not commonly encountered in the trade.

As usual many individuals consulted the collections and staff members for aid in studies or writings. Illustrations and information on disputed facts constituted the bulk of these outside requests, covering a wide range of subjects. Among various Government agencies aided were: Works Progress Administration in such projects as the Index of American Design, the American Guide, and the Historic American Merchant Marine Survey; Consumers Division of the Department of Labor on historical backgrounds for price studies; Department of Justice on litigation over aircraft propellers; and Office of Education on radio broadcasts in the Smithsonian series, "The World Is Yours." Information furnished private citizens was of wide scope, and many lots of material were received for examination and report.

In furtherance of the work of the department, several members of the staff studied material and exhibits in other parts of the country. Dr. Lewton visited New York and New Jersey in connection with the preparation of new exhibits; Frank A. Taylor, curator of engineering, inspected the Historic American Merchant Marine Survey project of the W. P. A. at Newport News, Va., Wilmington, Del., Philadelphia, New York, and Boston and examined and studied collections of ship models for their suitability for possible addition to the Museum's collection. He also examined lots of electrical and communications relics offered to the Museum at Watertown, Mass., and Flushing and Richmond Hill, N. Y., and visited several industrial museums. Miss Aida M. Doyle, aid in organic chemistry, also visited a number of industrial plants in the interest of our collections. On completion of his detail to inspect, dismantle, and pack the airplane *Winnie Mae* at Bartlesville, Okla., Paul E. Garber, assistant curator of engineering, examined the Lindbergh trophies at St. Louis.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

By far the largest distribution of specimens was the loan of 2,335 items contained in six traveling exhibits prepared by the division of graphic arts. The six exhibits were shown during the year 24 times in 11 States. Other divisions of the department distributed 630 specimens for educational or research purposes.

Toward the close of the year, the Loeb collection of chemical types, comprising 1,313 specimens, together with the complete card catalog and correspondence files pertaining to the collection, was transferred to the Chemists' Club, New York City, under an arrangement



undertaken at the request of Mrs. Loeb. Responsibility for this collection, which has been carried for a number of years by the Smithsonian Institution, has now been vested solely in the Chemists' Club.

## NUMBER OF SPECIMENS UNDER DEPARTMENT

The number of specimens in the department is 124,715 assigned as follows:

Engineering-----	16, 148
Textiles-----	14, 534
Wood technology-----	9, 556
Organic chemistry-----	21, 444
Foods-----	975
Agricultural history-----	1, 226
Medicine-----	17, 788
Graphic arts, including photography-----	43, 044
Total-----	124, 715

## DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

The interest of the public in the work of the division of history was demonstrated during the year by the selection of the original Star Spangled Banner and the costumes of the hostesses of the White House as subjects for two of the radio broadcasts in the Office of Education-Smithsonian series, "The World Is Yours." The activities of the division as a whole have been of interest and distinct scientific value to amateurs and specialists in the field of historical museum work. Correspondence in connection with the art, costume, domestic, military, naval, narrative, numismatic, and philatelic collections was unusually heavy.

With the development of historic sites under the National Park Service, much interest was manifest in the scientific classification of historical museum materials and in the relationship between the work of the museum of history and that of other types of museums. The division collaborated with the division of textiles in preparing a special exhibition of early American textiles, shown in the Natural History Building during January 1936.

### ACCESSIONS

The additions to the collection received during the year include 70 accessions and 2,715 specimens, exceeding both in number and importance those of the previous year.

The collection of materials of artistic and historical interest was enriched by the donation of a large number of mementos of the career of the eminent American author and diplomat, Brand Whitlock. These objects, nearly all of which were associated with the period of Mr. Whitlock's service as minister and ambassador to Belgium during the period of the World War, were presented by Mrs. Whitlock. The materials of primary importance include a large and unique series of gold, silver, and bronze medals, medalets, tokens, plaques, and plaquettes commemorating notable events in Belgian history and the work of various charitable organizations in Belgium during the World War. The collection includes also a silver cup presented to Ambassador Whitlock by the British Government; original decorations of exquisite design awarded to him by the Governments of Belgium, France, Japan, and Serbia; and a number of engrossed diplomas of citizenship and resolutions of thanks for his services in connection with the welfare of the Belgian people during the period of the occupation. The documents include the appointment of Mr. Whitlock as United States Minister to Belgium in 1913, a passport



issued to him by the German governor of Belgium in 1916, diplomas of citizenship of the cities of Antwerp, Brussels, Ghent, and Liège, diplomas of the Order of Leopold of Belgium, Order of the Legion of Honor of France, Order of the Rising Sun of Japan, and the Order of St. Sava of Serbia. The collection also contains a gold necklace presented to Mrs. Whitlock by the City of Brussels to which are attached two United States silver coins as emblems of the American contributions to the Belgian Relief Fund.

To the collection of paintings of artistic and historical interest was added an oil portrait of Maj. Gen. George A. Custer, deposited by the executors of Mrs. Custer. An oil painting by Frederick K. Detwiler showing the home of Joshua Hett Smith near Haverstraw, N. Y., in which Benedict Arnold and Maj. John André met in 1780 to plot for the surrender to the British forces of the American fortress at West Point, N. Y., was presented by Mrs. Thomas Burnham Enders.

To the domestic group of the collections there was added a knife case owned during the latter part of the eighteenth century by Charles Thomson, Secretary of the Continental Congress, 1774-1789, a bamboo cane presented to him by the Congress, and a letter written by him on July 5, 1783. These objects were presented to the National Museum by the estate of Dr. Charles A. Thompson through Miss Ella May Thompson.

To the military collections there was added an Austrian military officer's sword of the period of the American Revolution, presented by Miss Eugenia C. Willig. From Miss Frances M. Webster was received a sword and scabbard carried during the War with Mexico by Col. Lucien B. Webster, United States Army, and from Mrs. Edmund K. Webster a sword and scabbard carried by Maj. Gen. J. W. Davidson during the Civil War. From Mrs. Martha A. Hughes there was received a military sash and sword owned during the Civil War by Lt. William Allen, Indiana Volunteer Infantry.

An important addition to the military collections was a series of uniforms and other mementos of the military career of Maj. Gen. George A. Custer, United States Army, bequeathed by Mrs. Custer, including a linen towel used as a flag of truce on the occasion of the surrender of the Army of Northern Virginia at Appomattox Court House, Va., April 9, 1865, and the small pine table on which the conditions for the surrender were written by Gen. U. S. Grant. Objects deposited in the Museum included a sword and several uniform coats owned during the Civil War by General Custer, a Virginia State flag of the period of the Civil War, and a cavalry guidon of a later period. A gold watch presented to Maj. Gen. George O. Squier and a number of decorations awarded to him by foreign governments during the period of the World War were presented by the estate of Major General Squier.

To the military materials also was added a collection of mementos of the Lady Franklin Bay Arctic Expedition, commanded by Lt. (later Major General) Adolphus W. Greely, United States Army, during the period 1881-1884. These included a United States flag flown in the Arctic regions and a number of photographs showing scenes connected with the history of the expedition. These objects were lent by the children of General Greely: Antoinette Greely, Adola Greely Adams, John Nesmith Greely, Rose Ishbel Greely, Adolphus Washington Greely, and Gertrude Greely Shedd, through Col. John N. Greely. From John C. Greely there was received as a loan a Medal of Honor awarded by Congress to Major General Greely in 1935.

The naval collections were increased by the gift to the Museum of the entire collection of mementos of the career of Rear Admiral Winfield Scott Schley, which was lent to the Museum in 1911 by Mrs. Winfield Scott Schley and the children of Rear Admiral Schley. This collection was presented to the Museum during the past year by Mrs. R. S. Wortley, daughter of Rear Admiral Schley. This collection includes gold medals, dress uniforms, presentation swords and silverware, and miscellaneous naval mementos.

The naval collections were also increased by the donation of a series of mementos by Lt. Herbert Campbell, United States Navy. These objects included a naval sword presented to Lieutenant Campbell in 1897 by his shipmates, and a series of United States Naval service medals awarded to him for service during the period 1889-1930. From Lieutenant Campbell there was also received a series of miscellaneous naval relics.

To the numismatic collection was added a number of specimens of considerable historic interest. From the Treasury Department, Bureau of the Mint, there was received a series of examples of the United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1935. From the American Numismatic Association came a series of examples of coins struck recently for circulation in the following foreign countries: Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Egypt, Estonia, Ethiopia, Fiji, Finland, France, Germany, Great Britain, Greenland, Guatemala, Luxembourg, Morocco, New Zealand, Poland, Persia, Spain, Turkey, Udaipur, and Yugoslavia.

From the American Society of Tropical Medicine there was received a bronze copy of the Walter Reed Medal established by that society for accomplishment in the field of tropical medicine. From Miss Sarah Cooper Hewitt came a silver portrait medal of Abram S. Hewitt.

The philatelic collection was increased by the transfer from the Post Office Department of 1,917 specimens received by that department from the Universal Postal Union at Berne, Switzerland. From



Herbert S. Chamberlin came a special-delivery airmail cover carried on the first American rocket airplane mail and postmarked "Hewitt, N. J., Feb. 23, 1936", and from G. Ross Popkins an envelope mailed and postmarked March 4, 1933, and bearing the signatures of President Franklin D. Roosevelt and Vice President John N. Garner. From the National Geographic Society, through Dr. Charles G. Abbot, there was received as a gift an envelope carried in the stratosphere balloon *Explorer II* on the occasion of the unsuccessful flight of July 12, 1935, and also on the occasion of the record flight of November 11, 1935.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

The work of installing and preserving the historical collections progressed normally. Distinct improvement was made in the arrangement of the exhibition materials in a number of instances, the work being greatly facilitated by the employment of three additional preparators under the W. P. A. The removal of three large cases of domestic materials from the north hall rendered it necessary to reinstall these cases with materials of a similar character belonging to other collections. A special series of historical flags was installed in the rotunda on the occasion of the celebration of Flag Day, and various minor changes were made in connection with the exhibition and storage series.

An important achievement of the past year in connection with the exhibition series was the rearrangement of the arms collection under the direction of Assistant Curator Charles Carey, who during the past few years has made a special study of this subject. In the new arrangement the cases in the floor space will be devoted to the history of firearms and those around the walls will show the history of the sword, the saber, and other cut and thrust weapons. The various types of weapons in this hall will be so placed in topical and chronological groups that the collection will show the history of American arms from the period of the Revolution to the World War.

#### INVESTIGATION AND RESEARCH

In the past year much information was furnished to other Government bureaus and to private individuals. Of special importance was that on numismatics furnished to the Navy Department and the Treasury Department, and on philately to the Bureau of Engraving and Printing. There was also submitted to this bureau a series of photographs of swords and rifles of the War of the Revolution, the War of 1812, and the Civil War. These showed these two types of small arms arranged in pairs, one pair each for the two earlier conflicts and two pairs, one Union and one Confederate, for the Civil

War. They will be used by the bureau in connection with designs for the series of postage stamps now in process of preparation in commemoration of the careers of the leading naval and army commanders of the United States during the period from the Revolution to the Civil War.

The curator, T. T. Belote, participated in a conference of the members of the Commission for the Celebration of the 400th Anniversary of the DeSoto Expedition. He also visited museums containing historical material at Morristown, Fort Ticonderoga, and New York City. In the course of his visits to New York City he arranged for the acquisition of the Brand Whitlock collection and formally received, on behalf of the Smithsonian Institution, a baton made from the timber of the U. S. frigate *Constitution*, presented by Mrs. May Whitney Helms and Charles M. Whitney, Jr.

Mrs. C. L. Manning, philatelist, attended the Third International Philatelic Exposition in New York, May 11 to 17, at which she installed a special series of philatelic materials from the Museum collection and read a paper on "The Government Stamp Collection in the United States National Museum."

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year 898 specimens here on loan were returned to the owners, and 166 objects were loaned for study use.

#### NUMBER OF SPECIMENS UNDER DIVISION

Art-----	4, 627
Costumes-----	4, 172
Domestic-----	10, 592
Military-----	27, 549
Naval-----	2, 564
Narrative-----	2, 251
Numismatic-----	46, 470
Philatelic-----	399, 100
<hr/>	
Total -----	497, 325



## ACCESSIONS DURING THE FISCAL YEAR 1935-1936

(EXCEPT WHEN OTHERWISE INDICATED THE SPECIMENS WERE PRESENTED, OR WERE TRANSFERRED IN ACCORDANCE WITH LAW BY BUREAUS OF THE GOVERNMENT)

ABBOT, Dr. C. G. (See under National Geographic Society.)

ABRAHAM, STUART, Alexandria, Va.: 181 fishes, 6 crawfishes, 1 snake, 1 toad, 3 tadpoles, 7 shells, and 14 insects collected in tributaries of the Swannanoa and Catawba Rivers, N. C., and tributaries of the Potomac River south of Alexandria (135136). (See also under Smithsonian Institution.)

ACADEMY OF NATURAL SCIENCES, Philadelphia, Pa.: 5 insects (135191, 135642); 2,240 plants collected in Mexico by Dr. F. W. Pennell (135312, 138761; exchange); 6 fossil pelecypods from Eocene of South Carolina (136521); 52 shells from Southwestern United States (137747); 1 black-tailed Impeyan pheasant (139312, exchange); 1 plant (139313, exchange).

ACADEMY OF SCIENCES, Zoological Institute, Leningrad, U. S. S. R.: (Through Dr. Eupraxie Gurjanova) 376 Crustacea, comprising 229 amphipods, 146 isopods, and 1 cladoceran (137739, exchange); (through Dr. W. W. Markarov) 31 Crustacea (137749, exchange).

ADKINS, Dr. W. S. (See under Bureau of Economic Geology, Austin, Tex.)

AFRICA, Dr. C. M., Manila, Philippine Islands: 8 slides of Philippine trematodes (136752).

AGFA-ANSCO CORPORATION, Binghamton, N. Y.: 2 Agfa color plates and 2 colorscopes for viewing (137725).

AGRICULTURE, DEPARTMENT OF, Minas Geraes, Brazil: 22 plants from Brazil (137165).

AGRICULTURE, U. S. DEPARTMENT OF:

*Bureau of Animal Industry:* (Through Dr. E. W. Price) 3 slides of fresh-water copepods (138001).

*Bureau of Biological Survey:* 13 amphipods, 5 isopods, and 6 phyllopods (125456, 134770, 139173); 32 reptiles and amphibians (duplicates) from the Jornada Experimental Range, Dona Ana County, N. Mex., collected by Elbert L. Little, Jr., and John G. Keller (134450); 20 hawks (136925, 137220, 139871); 2 ptarmigan bodies (137007); 1 fly (137706,

loan); 1 nest and egg of Kentucky warbler (139305); 84 plants from United States (139570); 4 salamanders and 5 snakes collected by A. H. Howell in Highlands, N. C. (139813); 249 mammals collected by Biological Survey (139912); (through Clarence Cottam) 4 shells from Wakulla Springs, Fla. (136482, 139241); 1 shell from Habana, Cuba (138724); (through E. A. Goldman) about 370 shells from Mexico (135135); (through Neil Hotchkiss) 1 fern from South Dakota (139470); (through A. H. Howell) 5 birds in alcohol (135234); (through C. R. Mason) 1 pigeon hawk (135127). (See also under Earle R. Greene.)

*Bureau of Entomology and Plant Quarantine:* 4 mollusks from Mexico, Guatemala, and France and 26 isopods (135033); 22 shells from Italy and Cuba (135294); 96 isopods, 6 amphipods, 21 mollusks, 2 land planarians, 5 oligochaete worms, and 1 frog (135699, 135963, 136400, 136899, 137064, 137163, 138624, 138727, 139431); 3 mollusks from Venezuela, 11 isopods and 3 phyllopods (136725); 181 flies (46 species, of which 17 are represented by 62 paratypes) (137355); 3 shells from Palestine and Mexico and 1 isopod (137396); 6 isopods from South Africa and Jamaica and 8 mollusks from Central America (137766); 12 shells from Central and South America, 14 isopods and 8 amphipods (138185); 4 shells from Mexico (138248); 1 shell from Guatemala and 6 isopods (138351); 1 shell from Hawaii and 5 isopods (138662); 22 beetles (15 species, all paratypes) (138941); 1 shell from Nicaragua and 5 isopods (139069); 2 shells from Mercedes, Tex. (139177); 12 wood samples collected in connection with Dutch elm disease control (139697); about 44,000 miscellaneous insects retained from collections received during the year for identification (139910); (through David Lumsden) wood sample of oleander from Italy (137957).

*Forest Service:* 1 plant from Minnesota (136754).

*Bureau of Plant Industry:* An Audifren-Singrum refrigerating machine of about 1914 (137129); 1 plant from Korea (137221); about 1,200 plants from Inner Mongolia (138616, 138655); 1,205 plants collected in West Indies and South America by W. A. Archer in 1934 and 1935 (136438); 67 miscellaneous insects and 48 isopods (139442); 4 trunk sections of oaks felled in the National Arboretum during 1935 (139502); (through Dr. E. C. Auchter) the cactus collection assembled by the late Dr. David Griffiths, consisting of about 5,000 specimens (chiefly *Opuntia*), about 1,000 watercolor paintings of same, and a large quantity of notes, photostat and other records, negatives, photographic prints, and publications relating thereto (136884); (through Dr. S. F. Blake) 17 plants from Minnesota and North Dakota (138217); 1 wood sample each of Brazilian liana and creosotebush (139880); (through Mrs. Agnes Chase) 7 plants from Costa Rica collected by W. A. Archer (138508); (through Dr. Frederick V. Coville) 4 plants from Virginia (135116); 11 plants from California (135561, 137958, 139182, 139184); plants from Death Valley, Calif., collected by M. French Gilman (136405, 137361); 15 plants from the Western United States (139320); 1 plant from Yellowstone National Park (139372); (through C. O. Erlanson) 47 plants from Southern United States (135236); 119 plants from Southeastern United States (135318); 2 plants (136606); 153 plants collected in Chesapeake Bay region by Ivar Tidestrom (138215); 7 photographs and 4 specimens of plants from Mexico and United States (138485); (through O. M. Freeman) 1 fern from Tennessee (135562); (through Stephen H. Hastings) 857 plants, chiefly from United States and northern Africa (138770); (through Dr. T. H. Kearney) 38 cultivated plants (137452, 137469); 3 lichens from Arizona (135156); 33 mosses from Arizona (135159); 1,014 plants from Arizona (138223, 138367, 139321, 139809); 35 ferns from Arizona (138250); (through B. Y. Morrison) 51 plants from Grand Canyon National Park, Ariz.

(135691); 66 plants from Utah (136316); 2,493 plants collected in South America (mainly Ecuador) by Mrs. Ynes Mexia (136701); 2,613 plants collected in Brazil by Boris A. Krukoff (137206); about 300 plants from North Manchuria collected by T. P. Gordeev (138706); (through R. H. Peebles) 1 plant from Arizona (135161); (through Paul Russell) 25 ferns collected in Ecuador by Mrs. Ynes Mexia (135193); 1 plant from Hawaii (135358); (through John A. Stevenson) 10 plants, mostly from Western United States (136465); 1 moss from Great Britain (138218); (through J. R. Swallen) 194 plants collected by him in Brazil (139389).

*Soil Conservation Service:* (Through S. B. Detweiler) 1 sample each of bark and wood of shipmast locust (138506); (through Jess Fufts) 2 ferns from Nebraska (139063, 139510).

AGUAYO, Dr. C. G., Habana, Cuba: 80 land, fresh-water, and marine shells from Cuba (2 lots of paratypes) (133830).

AINSLIE, C. N., Sioux City, Iowa: 430 insects (135454, 135933); 50 Microlepidoptera from Sioux City (139699).

ALABAMA MUSEUM OF NATURAL HISTORY, University, Ala.: Archeological material from Moundville, Tuscaloosa County, Ala. (138988).

ALASKA, UNIVERSITY OF, Agricultural Experiment Station, College, Alaska: 68 mosses collected in Alaska by Mrs. Luella G. Smith (138525).

ALBRIGHT, Dr. C. C., Great Falls, Mont.: 4 butterflies (137931).

ALICATA, Dr. J. E., Honolulu, Hawaii: 11 amphipods (137919); 5,183 fresh-water shells (113 lots) from Oahu, Hawaii, involved as intermediate hosts of the liver fluke of cattle (138719). (See also under Hawaii Agricultural Experiment Station.)

ALLEN, A. R., Trinidad, Colo.: 1 slice of the Roy, N. Mex. (no. 2), meteorite (136744, exchange); in cooperation with Roebling fund, 1 slice of the Cerros del Buei Muerto, Chile, meteorite (135484, part exchange).

ALLEN, E. R., Silversprings, Fla.: 1 turtle from 15 miles west of Dunnellon, Fla. (138740). (See also under Florida Reptile Institute.)

ALLEN, VADA H., Moscow, Idaho: 6 plants from Idaho (138628).

AMARAL, Dr. AFRANIO DO. (See under Instituto Butantan.)

AMERICAN MUSEUM OF NATURAL HISTORY, New York City: 74 spiders



- (21 species, of which 4 are represented by 17 paratypes) (136743); 1 spider (137344); (through Dr. W. J. Gertsch) 12 spiders (4 species) (136154).
- AMERICAN NUMISMATIC ASSOCIATION, New York City: (Through Moritz Wormser) Coins of Abyssinia, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Egypt, Estonia, Fiji, Finland, France, Germany, Great Britain, Greenland, Guatemala, Luxembourg, Morocco, New Zealand, Poland, Persia, Spain, Turkey, Udaipur, and Yugoslavia, struck 1922-35, and a silver medal commemorating the 300th anniversary of the death of Wallenstein in 1634 (135630, loan).
- AMERICAN PHARMACEUTICAL ASSOCIATION, Washington, D. C.: (Through Dr. E. G. Eberle) photograph of American Institute of Pharmacy and a copy of the Code of Ethics of the American Pharmaceutical Association (135175); (through Dr. E. F. Kelly) official copy no. 116020 of the National Formulary, sixth edition (138505).
- AMERICAN POTASH & CHEMICAL CORPORATION, Trona, Calif.: 1 lot of drill core of salts from Searles Lake, Calif. (138352).
- AMERICAN SOCIETY FOR THE CONTROL OF CANCER, New York City: 1 strip film entitled "Fight Cancer with Knowledge" for use in delineascope to supplement cancer exhibit (139046).
- AMERICAN SOCIETY OF TROPICAL MEDICINE, Columbus, Ohio: Bronze copy of the Walter Reed Medal awarded by the society for accomplishment in the field of tropical medicine (139383).
- AMERICAN SPONGE & CHAMOIS Co., New York City: (Through Dr. Lewis Radcliffe) 1 Mediterranean silk sponge (138442).
- AMERICAN THREAD Co., Inc., Philadelphia, Pa.: 404 specimens (20 types) of cotton threads for domestic sewing, embroidering, and crocheting and for manufacturing garments, straw hats, and shoes, showing 26 forms of put-ups on spools, cones, tubes, and balls (139878).
- AMORTEGUI, Dr. B. G., Bogota, Colombia: 2 mosquitoes (135015); 11 insects, 9 lizards, 5 frogs, and 1 plant (135112); 2 Lepidoptera (136448); small collection of miscellaneous insects and 46 plants from Colombia (136714); 4 insects from Colombia (138491).
- ANDERSSON, Capt. K. S., San Francisco, Calif.: 5 painted balsawood carvings from Chocoe Indians of Chucunaque River district of southeastern Panama (137990).
- ANDREWS, Mrs. C. C., Washington, D. C.: Pitcher of English manufacture, probably Worcester, period of 1790 (136476).
- ANDREWS, Dr. E. A., Baltimore, Md.: 352 mollusks collected in Jamaica in 1932 (135134).
- ANDREWS, Mrs. E. F., Alexandria, Va.: A Dutch charcoal brazier (137169).
- ANGELL, J. W., New York City: 1 beetle (135226).
- APOLLINAIRE-MARIE, Rev. Brother, Bogota, Colombia: 6 ferns from Colombia (138458); 29 plants from Colombia (138509).
- APPEL, W. D., Washington, D. C.: 6 bottles of plankton from a small pond on Maryland shore near Plummers Island (135824).
- ARBELAEZ, Dr. E. P. (See under Ministerio de Industrias.)
- ARCHAEOLOGICAL SOCIETY OF WASHINGTON, D. C.: Collection of Paleolithic artifacts from Mugharet et-Tabun (Cave of the Oven), near Athlit, Palestine, obtained by the 1934 joint expedition of American School of Prehistoric Research and British School of Archaeology in Palestine (133080, deposit).
- ARCHER, Dr. ALLEN, Cambridge, Mass.: 220 shells from United States (139056).
- ARCHER, W. A., Washington, D. C.: A small lot of pottery figurines and potsherds from British Guiana (135300, loan); embroidered apron from Quito, Ecuador, pendant of bird feathers on mother-of-pearl from Bogota, Colombia, and a cup (bitter cup) of *Quassia amara* wood from British Guiana (135301); collection of toys (jugetes) consisting of 2 figurines built up of corn husks and 10 of painted earthenware (136501); collection of 23 toys (jugetes) modeled from wood, clay, and raffia (136612); 5 glazed earthenware toys (jugetes) (136924); collection of toys from Guatemala (137094).
- ARGENTINE EMBASSY. (See under San Martin Museum of Buenos Aires.)
- ARKANSAS STATE TEACHERS' COLLEGE, Conway, Ark.: (Through Flora C. Haas) 61 plants from Arkansas (138696).
- ARKANSAS, UNIVERSITY OF, Fayetteville, Ark.: 6 ferns from Arkansas (136746, exchange).
- ARMOUR & Co., Chicago, Ill.: 1 4-ounce specimen of liquid extract of liver, U. S. P. XI (139436).
- ARMSTRONG, W. J., Washington, D. C.: A model,  $\frac{1}{8}$  size, of Curtiss F-11-C-2 airplane, a U. S. Navy fighter type, 1933 (136518, loan).



- ARNOLD, ALMON. (See under Dr. G. S. Myers.)
- ARNOW, I. F., St. Marys, Ga.: 1 marine annelid (137765).
- ARSÈNE, Rev. Brother G., Santa Fe., N. Mex.: 514 plants from New Mexico (137679).
- ARTZ, LENA, Arlington, Va.: 110 plants from Virginia (135120, 136995).
- ASBRIDGE, ORAN AND STANLEY, Bonne Terre, Mo.: 1 beetle larva infested with fungus (138957).
- ASCHEMEIER, C. R., Washington, D. C.: 15 fishes from Weverton, Md. (139-058); 1 wood thrush (139438); 7 birds collected in Maryland (139-517). (See also under Smithsonian Institution.)
- ATCHISON, J. A., Washington, D. C.: A sculptured group of the six men who formed the flying personnel of the first round-the-world flight, accomplished by the United States Army Air Corps in 1924 (139686, loan).
- ATELIERS D'AVIATION LOUIS BRÉGUET, in cooperation with the Société Hispano-Suiza, Paris, France: Model,  $\frac{1}{16}$  size, of the French Bréguet airplane *Point d'Interrogation*, which in September 1930 made the first nonstop flight from Paris to New York, piloted by Coste and Bellonte (116112).
- AUCHTER, Dr. E. C. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- AUTHERNIETH, HERSCHEL, Mattoon, Ill.: 2 aluminum Illinois sales tax tokens (138633).
- BACONE COLLEGE, Bacone, Okla.: (Through Clarence Foster) 236 Carboniferous invertebrate fossils from Oklahoma (136651, exchange).
- BAGGLEY, Mrs. H. A., Washington, D. C.: 11 plants from Yellowstone National Park (139482).
- BAILEY, Prof. L. H., Ithaca, N. Y.: 1 cultivated plant from Florida (136462, exchange).
- BAILEY, VERNON, Washington, D. C.: 3 photographs of type specimens of cacti from Oklahoma (138205); 7 ferns from southern California (138214); 4 skulls of birds (139811).
- BAIN, Mrs. H. F., Hartsdale, N. Y.: A Shippo cloisonné Japanese vase and stand (136879, loan).
- BAIRD, Mrs. G. W., Washington, D. C.: (Through Rear Admiral G. W. Baird) Friendship crazy quilt, Paisley shawl, oil portrait of child by Victor Mindeff, and 2 prints from Godey's Lady's Book (90658, bequest).
- BAKELITE CORPORATION, Bound Brook, N. J.: Voltmeter for measuring electrical current, in a Bakelite molded case, with specially mounted Bakelite insulating bushings and laminated washers, to demonstrate applications of smallest pieces molded from Bakelite (138478).
- BAKER, Mrs. BEATRICE W. (See under Capt. H. L. Wilson.)
- BAKER, F. C., Washington, D. C.: 13 flies (2 species, 1 of which is represented by type, allotype, and 3 paratypes) (137358).
- BAKER, Dr. F. H., Richmond, Victoria: 11 insects and 30 shells from Australia (137701); 83 shells from Australia (138732, exchange).
- BAKER, Dr. FRED, Point Loma, Calif.: 1 shell from Hilo, Hawaii (137472).
- BAKER, W. E., Boise City, Okla.: 5 plants from Oklahoma (136117, 136619).
- BALDWIN BIRD RESEARCH LABORATORY, Cleveland, Ohio: (Through Dr. H. C. Oberholser) 2 specimens of Ohio wren (139799, exchange).
- BALL, Dr. C. R., Washington, D. C.: 27 plants from Arizona (136978, exchange); 8 plants from Eastern United States (137746, exchange).
- BALL, E. M., Falls Church, Va.; 1 curlew and 1 Pacific golden plover from Alaska (136994).
- BALL, W. H., Washington, D. C.: 1 woodcock (135888); insects (137461); 75 amphipods, 50 isopods, 6 flatworms, and 2 beetles from District of Columbia, Virginia, and Maryland (139391); 1 fence lizard from near Berkeley Springs, W. Va. (139689). (See also under Smithsonian Institution, National Museum.)
- BALLARD, S. I., Arlington, Va.: Glass pitcher made by William Henry Stiegel about 1772 at Manheim, Pa. (138771).
- BALTIMORE & OHIO RAILROAD Co., Baltimore, Md.: (Through Robert M. Van Sant) Original locomotive *Atlantic* and other material from the Baltimore & Ohio historical collections lent to commemorate a century of the railroad in Washington, D. C. (132860, loan).
- BALTIMORE SOCIETY OF MODEL ENGINEERS, Baltimore, Md.: A scale model of Baltimore & Ohio locomotive no. 4400 (135886, loan).
- BANDY, M. C., Boston, Mass.: 3 large kohnkite crystals from Chuquimata, Chile (135483); 736 invertebrate fossils from Jurassic rocks of Chile (137099).
- BANNAN, BERTHA L., Pottsville, Pa.: Uniform coat, vest, cap, hat, and buttons owned by Surgeon Douglass R.



- Bannan, U. S. Navy, 3 documents relating to his career, and a photograph of him (129508).
- BANNING, DR. BARBARA E., Brooklyn, N. Y.: The original drawings and 1 photograph used in the autobiography of Andrew T. Still, the founder of osteopathy (138778).
- BARBER, H. S., Washington, D. C.: 3 land shells from Norfolk County, Va. (135688); 4 fishes from mouth of Jericho Ditch, Lake Drummond, Dismal Swamp, Va. (135692). (See also under Mrs. T. L. Hunter.)
- BARLOW, ALICE W., San Diego, Calif.: Sample of cerargyrite probably from Al Fin Hallado, Tres Puntos, Chile (139147).
- BAENARD, DR. K. H. (See under South African Museum.)
- BARRET, DR. H. P., Charlotte, N. C.: 3 specimens of gummite and uraninite from Spruce Pine, N. C. (139818).
- BARRET, JOHN. (See under Henry Monroe.)
- BARTH, DR. TOM, Washington, D. C.: Collection of anorthosite and associated rocks from Norway and New York (137750).
- BARTHOLOMEW, J. R., New York City: 38 slides, in duplicate, of diatoms (139315).
- BARTLETT, CAPT. R. A., New York City: Collection of marine invertebrates from West Greenland, echinoderms, mollusks, fishes, insects, algae, minerals (134562). (See also under Dr. Martin Porsild.)
- BARTON MINES CORPORATION, North Creek, N. Y.: (Through Frank C. Hooper) 4 specimens of garnet (abrasive ore) from Gore Mountain Mine, North Creek, Warren County, N. Y. (136491).
- BARTSCH, DR. PAUL, Washington, D. C.: 63 fishes from Dawsons Point, Va. (135230); 240 land and fresh-water snails and a collection of spiders and insects from Piney and Eastern Branches and the point south of Roaches Run, D. C. (135290); 12 shells from Tarpon Springs, Fla. (139528); with Dr. J. P. E. Morrison, collection of 100 land and 600 fresh-water mollusks, 61 fishes, 3,017 insects, 8 crustaceans, and 43 salamanders from west side of Blue Ridge and Shenandoah River (135365); 1,000 unionids, 50 gastropods, insects, and mites from points on Potomac River south of Washington (135480); 5,000 mollusks, about 12 insects and spiders, and 25 crustaceans from Plumpoint, Md. (133714).
- BASIAS, F. E. (See under Government of Philippine Islands, Bureau of Health.)
- BASS, J. H., Washington, D. C.: 5 oysters from Galveston and Atchafala Bays, Tex. (136889).
- BASS BIOLOGICAL LABORATORY, Englewood, Fla.: (Through Stewart Springer) 8 ascidians, 9 hippas, 8 shrimps, 4 hermits, 17 crabs, 1 porcellanid, echinoderms, mollusks, insects (137121); 64 Crustacea from Florida (137927, 138515).
- BATES, EDITH, Redlands, Calif.: 4 rose beetles (135707).
- BAUER, L. H., Franklin, N. J.: 1 specimen of ganophyllite from New Jersey (137372).
- BAUSCH & LOMB OPTICAL CO., Rochester, N. Y.: 6 specimens of American spectacles, period of 1820 to 1860 (137142).
- BAUSMAN, LOTTIE M., Lancaster, Pa.: (Through Cora C. Curry) Paisley shawl purchased in Pennsylvania about 1876 by donor's mother (136666).
- BAYLIFE, Prof. W. H., Annapolis, Md.: 2 slides of a trematode (137057).
- BEACH, W. N., New York City: 4 red grouse from Scotland (136423).
- BEAL, Prof. J. M. (See under University of Chicago.)
- BEATTIE, DR. R. K., Washington, D. C.: 421 plants from Japan (136659, 139683); 139 flowering plants from Japan (138966); 117 ferns from Japan (139083, 139548); 40 plants from the Siskiyou Mountains, Oreg. (139183).
- BEATTY, H. A., Christianstad, St. Croix, Virgin Islands: 254 mollusks, collection of Crustacea and 1 insect from St. Croix (135333, 137710).
- BEHRMAN, I. E., New York City: (Through Frank L. Hess) 1 specimen of pitchblende from Hottah Lake, Northwest Territories, Canada (138207).
- BENESH, BERNARD, North Chicago, Ill.: 2 beetles (136104, exchange).
- BENSON, G. M., Nampa, Idaho: 1 raven's nest (136569).
- BENSON, LYMAN, Bakersfield, Calif.: 75 plants from California (139505, exchange).
- BEQUAERT, DR. JOSEPH, Boston, Mass.: 1 fly (136921).
- BERGER, GRACE, East Orange, N. J.: Purple wedding gown of about 1850 (135344).
- BERMUDEZ, DR. P. J., Cambridge, Mass.: 6 shells from Cuba (139702).
- BERNARD, FERNANDO, Habana, Cuba: 7 medusae, 1 blind snake, and 6 insects from Cuba (134392, 135560, 136873).
- BERRY, Prof. E. W., Baltimore, Md.: 5 ferns from Alabama (135121).
- BERRY, S. S., Redlands, Calif.: 72 land, fresh-water, and marine shells from

- Nevada, California, and Mexico (7 paratype lots and 1 topotype lot) (136068, exchange); about 40 Pleistocene Bryozoa from San Pedro, Calif. (137428).
- BERRYMAN, TOM, Kotzebue, Alaska: (Through H. S. Price): 3 fossil bison bones from near Point Lockhart, Alaska (137066).
- BERTHIER, V. G., Caracas, Venezuela: (Through J. L. Colom) 8 insects (137444).
- BEUTENMÜLLER, EDNA M., New York City: The collection of the late William B. Beutenmüller, comprising 4,551 insects and 3,848 galls, and including much paratype material and about 100 types (135868).
- BICKFORD, C. T., Orlando, Fla. (Through Dr. C. W. Stiles) 1 deer skull (137460).
- BICKLEY, W. E., Jr., Byington, Tenn.: 9 insects (136817).
- BIGELOW-SANFORD CARPET Co., Inc., New York City: 29 carpets and rugs, 1 old carpetbag, and 26 mounted photographs illustrating carpet manufacture (139911).
- BINGHAM OCEANOGRAPHIC FOUNDATION, New Haven, Conn. (Through M. D. Burkenroad) 1 shrimp (135231).
- BINNEWIES, W. G., Grand Junction, Colo.: 11 dinosaur gastroliths from Colorado (134753).
- BIRKHOFF, CLIFFORD, Battle Creek, Mich.: 7 insects (135089).
- BISELL, MRS. ELEANOR WOLFLEY, MRS. CAROLINE WOLFLEY SHANNON, and MRS. ELIZABETH WOLFLEY HARMAN, Washington, D. C.: (Through Thomas J. Shannon) An ambrotype picture of Surgeon Lewis Wolfley, U. S. Navy, and a miniature book "Bijou Illustrations of the Holy Land" (138362, 138463).
- BISHOP MUSEUM, BERNICE P., Honolulu, Hawaii: 277 plants from Samoa (136451, 137769; exchange); 262 plants from Polynesia (136685, 136720; exchange); (through R. L. Usinger) 8 bugs (5 species) all from Hawaiian Islands except 1 paratype from Mexico (139242).
- BLACK, J. R., Leaf, Miss.: (Through Dr. C. E. Burt) 10 reptiles and amphibians from Mississippi (136197).
- BLACKBOURN, B., Melbourne, Victoria: 12 Hymenoptera from Australia (137168).
- BLAIR, ALEXANDER, Lake Placid, Fla.: 1 insect (135902).
- BLAIR, A. P., Tulsa, Okla., 4 isopods (137774).
- BLAKE, Prof. I. H., Lincoln, Nebr.: 14 insects (131498).
- BLAKE, Dr. S. F., Washington, D. C.: 70 bryozoans from Pliocene of South Carolina and Pleistocene of Maryland (135162); 1 plant from Virginia (135553, exchange); 48 plants, chiefly from Eastern United States (136909, exchange); 1 specimen of the pavement teeth of an Eocene fish from Maryland (136984); 4 shells from North Carolina (138339). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)
- BLANCHARD, C. J., Washington, D. C.: 69 fishes (5 species) collected by donor 8 miles above San Pedro, Chamelican River, northwestern Honduras (138077).
- BLAND, G. V., Hill City, S. Dak.: (Through F. L. Hess) 1 specimen of columbite ore from South Dakota (137038).
- BLANDFORD, G. E., Washington, D. C.: 1 specimen of tetrahedrite from Virginia (137036).
- BLISS, Mrs. R. W., Georgetown, D. C.: 2 butterflies from South America (136650).
- BOLINE, E. N., Lindsborg, Kans.: 58 spiders (135924).
- BONNERJEA, Dr. BIREN, Washington, D. C.: Stone implements and projectile points collected in 1933 chiefly near New Market, Va. (139546).
- BOOKER, Dr. F. W. (See under New South Wales Geological Survey.)
- BOSWELL & DAVIDSON, Inc., Cohoes, N. Y.: 4 samples of metal core yarn and 9 of woven and knitted fabrics, showing use of metal core yarn patented by William Colvin, Jr., Troy, N. Y. (136429).
- BOTANISCH MUSEUM EN HERBARIUM, Utrecht, Netherlands: 228 plants from Surinam (136652, exchange); 1 plant (137743, exchange).
- BOTTIMER, L. J., Haddon Heights, N. J.: 22 flies (136941); 6 scarabaeid beetles and a small series of buprestid beetles (137781); 6 beetles (133090).
- BOULON, Mrs. P. A., Rio Piedras, Puerto Rico: 59 mollusks (135576).
- BOUVELL, MARJORIE, Spanish Town, Jamaica, British West Indies: 1 plant from Jamaica (137077).
- BOWLES, EDGAR, Washington, D. C.: 1 snake from Orkney Springs, Va. (135320). (See also under Dr. Julia A. Gardner.)
- BOWMAN, Mrs. PAUL, Arlington, Va.: 1 yellow-breasted chat (136193).
- BRACELIN, Mrs. H. P. (See under Mrs. Ynes Mexia.)
- BRADY, M. K. (See under Hans Geyer.)
- BRAECKLEIN, J. G., Kansas City, Mo.: An old Spanish bronze halberd head found in Barber County, Kans., and



- an old wrought-iron spearhead found near Dodge City, Kans. (138242).
- BRANCH, W. E. (See under U. S. Department of the Interior, National Park Service.)
- BRAND, A. S., Culpepper, Va.: 1 red-winged blackbird (138665).
- BRANDT, B. B., Durham, N. C.: 24 tree frogs and eggs from Washington, N. C. (131892).
- BRANSON, Dr. C. C., Providence, R. I.: Metatypes of 5 species of Morrison invertebrate fossils from Wyoming (136652).
- BRAY, R. S., Washington, D. C.: 1 plant from Virginia (135196).
- BRAY, W. H., Washington, D. C.: 1 daguerreotype (135154).
- BRAZIL NATIONAL DEPARTMENT OF PUBLIC HEALTH, Rio de Janeiro, Brazil: (Through Dr. J. A. Kerr) 11 mosquitoes (3 species), all paratypes (137153); 23 mounted mosquitoes and the mounted genitalia of 5 of them, representing 3 different species (137212).
- BREDER, C. M., Jr. (See under New York Aquarium.)
- BRENNER, Mrs. JULIA, San Francisco, Calif.: 48 study samples, including European silks and velvets of 16th, 17th, 18th, and 19th centuries, and English, French, and American printed cottons and linens of 18th and 19th centuries (139475).
- BRENNER, RUTH M., San Francisco, Calif.: Portion of a hand-woven coverlet of homespun cotton yarn with "overshot" wool pattern showing features of "Governor's Garden" and "Rose of Sharon" designs (135235); portions of 2 hand-woven coverlets, one of homespun cotton yarn with "overshot" wool pattern "Catalpa Flower" and the other of homespun linen and wool yarns in a flat, ribbed weave, block pattern (136393); fragment of a "Washington Centennial print", showing portrait medallions, collected in Connecticut by donor for collection of American subjects on printed cottons (137364).
- BREWOD, A. H., Washington, D. C.: Copy of official program for Jackson Day Dinner held January 8, 1936 (138346).
- BRIDGE, Dr. JOSIAH. (See under Robert M. Whiteside.)
- BRIDWELL, J. C., Washington, D. C.: 2 beetle larvae (135566); 8 plants from Maryland and Virginia (135837).
- BRIGHAM, Dr. E. M., Battle Creek, Mich.: 1 crayfish with deformed claw (138187).
- BRIGHT, JOHN, Pittsburgh, Pa.: 44 plants from Colorado (137384).
- BRINKMAN, A. H., Craigmyle, Alberta: 26 plants from Alberta (137975).
- BRISCOE, M. S., Harpers Ferry, W. Va.: 34 land and fresh-water mollusks (135011); 24 land and fresh-water shells from Jefferson County, W. Va. (137215).
- BRITISH GOVERNMENT:  
*British Museum (Natural History)*  
 London, England: (Through Dr. Ch. Ferriere) 29 Hymenoptera (19 species, 12 of which are represented by 17 cotypes) (131711, exchange); 5 Hymenoptera (4 species), all paratypes (135651, exchange); (through Dr. Isabella Gordon) 4 shrimps (136634, exchange).  
*Royal Botanic Gardens, Kew, England*: 15 plants (135036, exchange); 68 plants collected in Mexico by G. B. Hinton (136318, 137040, exchange); 104 plants from Mexico and Colombia (136753, exchange); 117 photographs of type and other specimens of plants 138224, exchange).
- BRODRICK, H. J., George Washington Birthplace National Monument, Westmoreland County, Va.: (Through P. R. Hough) 1 junco (137406).
- BRONAUGH, C. B., Afton, Okla.: 1 shell from Mississippian rocks of Oklahoma (135138).
- BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 50 plants (138713, 138753; exchange).
- BROOKS, Maj. ALLAN, Okanagan Landing, British Columbia: 2 Thayer's gulls (135741, exchange).
- BROOKS, Mrs. MILDRED B., Los Angeles, Calif.: 40 etchings and dry-points for special exhibition during March 1936 (137979, loan); 6 prints made for the Government under W. P. A. by Mrs. Brooks (1934): "Little Growing Thing", "Trespassers", "Mother Mountain", "Baby Street", "Friends of the Winds", and "Vagabonds" (138775).
- BROOKS, Dr. S. T., Pittsburgh, Pa.: 2 parasitic isopods (138695, exchange).
- BROWN, C. A., Baton Rouge, La.: 4 ferns from Louisiana (137019).
- BROWN, Dr. R. W., Washington, D. C.: 1 fossil cone (type) from Cretaceous of Maryland (136954).
- BROWN, Dr. T. T., Zanesville, Ohio: 1 Devonian trilobite (137109).
- BROWN, W. J. (See under Canadian Government, Department of Agriculture.)
- BROWN, W. L., Washington, D. C.: 1 deer and 1 bear skull from Dismal Swamp, Va. (138200). (See also under Smithsonian Institution.)



- BRUNER, S. C., Santiago de Las Vegas, Cuba: 369 Heteroptera (97 species, 9 represented by types and 9 by 32 paratypes) (135172); 3 beetles from Cuba (135281).
- BUCHANAN, L. L., Washington, D. C.: 30,000 beetles of about 7,000 named forms in the family Curculionidae, assembled by the late Albert Bovie of Belgium and obtained by donor from Emmerich Reitter of Troppau, Czechoslovakia (135194).
- BUCHER, W. F., Washington, D. C.: Wood samples of red pine and pomegranate (139820).
- BUCHHOLZ, OTTO, Westfield, N. J.: 203 miscellaneous insects (136115 exchange); 3 Lepidoptera (3 species) (136888, exchange).
- BUEHLER, W. C., Pasadena, Calif.: 3 specimens of polished blue agate from Chocolate Mountain district of southeastern California (134758).
- BUFORD, F. P., Thompsons Station, Tenn.: 1 butterfly from Tennessee (137136).
- BULLARD, MATTIE G., Washington, D. C.: (Through Madge L. Guard) Collection of Arizona copper minerals and ores (135160).
- BUNKER, Dr. C. D. (See under Kansas University.)
- BURDINE, L. E., Washington, D. C. (See under Estate of W. T. Burdine.)
- BURDINE, ESTATE OF WILLIAM THOMAS: (Through L. E. Burdine) 2 meerschau pipes (136136).
- BUREAU OF ECONOMIC GEOLOGY, Austin, Tex.: (Through Dr. W. S. Adkins) About 211 fossil Crustacea (128237, deposit).
- BURKENROAD, M. D. (See under Bingham Oceanographic Foundation.)
- BURT, Dr. C. E., Winfield, Kans.: 790 reptiles and amphibians, 6 vials of mollusks, 5 lots of crustaceans, and a few insects from South-central United States (134220, collected for Museum.) (See also under J. R. Black and D. B. Whites.)
- BURTON, Mrs. ELIZABETH E., New York City: 3 block prints in color: "Zojoji Temple, Shiba Park, Tokyo", "The Cherry Tree, Japan", and "Kasuga Shrine, Nara"—after the watercolor paintings by Mrs. Burton; the blocks were cut and printed by J. Kato (137426).
- BUSCK, AUGUST. (See under Comdr. C. M. Dammers.)
- BUTCHER, DEVEREUX, Lumberville, Pa.: 51 photographs of California missions (137966, loan).
- BUTLER, A. W., Indianapolis, Ind.: 2 juncos (137753).
- BUTLER, C. P., Calama, Chile: 53 Jurassic invertebrate fossils from Calama (136258).
- CABALLERO Y C., Prof. EDUARDO, Mexico, D. F.: 3 helminths (137017, 138600.)
- CAHALANE, V. H. (See under U. S. Department of the Interior, National Park Service.)
- CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 88 plants from Western United States (137086, exchange); 6 beetles, 3 of which are paratypes (137360, 137909, 139308; exchange); (through E. P. Van Duzee) 3 bugs (2 species), all paratypes (137465.)
- CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: (Through H. H. Keifer) 16 Microlepidoptera (8 species), all paratypes (135019); 100 Microlepidoptera, including paratypes of 4 new species (129523).
- CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif.: 3 insect larvae (138330).
- CALIFORNIA INSTITUTE OF TECHNOLOGY, Pasadena, Calif.: (Through W. P. Popenoe) 23 Cretaceous mollusks from California (136489); 8 small blocks of Mesozoic limestone containing brachiopods from California (137032).
- CALIFORNIA PACIFIC INTERNATIONAL EXPOSITION, San Diego, Calif.: (Through J. W. Hiscox) Gold medal awarded to the Smithsonian Institution by the California Pacific International Exposition (136982).
- CALIFORNIA, UNIVERSITY OF, Berkeley Calif.: 115 fungi (136644, exchange); 1 plant from Alaska (136969, exchange); 127 plants (139471, exchange).
- CALIFORNIA, UNIVERSITY OF, Los Angeles, Calif.: 1 plant from Mexico (138754, exchange); (through Dr. Carl Epling) 137 plants from California (138225, exchange).
- CAMARGO, Dr. F. C., Campinas, Brazil: 4 beetles and 1 drawing of an insect (138748).
- CAMERA CLUB, New York City: 50 prints, "Member's Show", for exhibition during October 1935 (136490, loan).
- CAMPBELL, GUY, New Albany, Ind.: 54 Devonian and Mississippian invertebrate fossils from Indiana (137030).
- CAMPBELL, Lt. HERBERT, Washington, D. C.: Art, ethnological, naval, numismatic, and miscellaneous materials (139685).
- CAMPBELL, MELFORD, Madison, Ind.: 8 mammals from Indiana (139474).
- CAMPBELL, Dr. W. W., Washington, D. C.: Photograph of Jassa Salganik's portrait painting of Dr. Daniel Coit Gilman, past president of John Hopkins University and first



president of the Carnegie Institution of Washington (135322).

CANADIAN GOVERNMENT:

*Department of Agriculture, Entomological Branch, Ottawa, Ontario:* (Through W. J. Brown) 4 beetles (2 species) (137180, exchange); (through G. Stuart Walley) 1 insect recently described by Walley (138589, exchange); 2 paratypes (2 species) of Hymenoptera (134328, exchange).

*Department of the Interior, National Parks of Canada, Okanagan Landing, British Columbia:* 17 shells from British Columbia (137422).

CANAL ZONE EXPERIMENT GARDENS, Summit, Canal Zone: 15 plants from Panama (135952).

CANFIELD FUND, Smithsonian Institution: 1 specimen of joaquinite from San Benito County, Calif. (134181); minerals from Rutherford mine, Amelia, Va., collected by E. P. Henderson (135065); 8 specimens of minerals, including 1 beryl crystal, azurite, chrysoprase, etc. (135067); 1 specimen of sylvanite (135192); 1 carrusite specimen from Tsumeb, Africa (135665); 350 mineral specimens from Chile collected by Mark C. Bandy (135754); 1 specimen of ruby sphalerite, from Woodchuck mine, Cardin, Ottawa County, Okla. (136058); 1 lot of zeolites from Table Mountain, Colo., and 1 melonite from Cresson mine, Cripple Creek (136464); 4 specimens of calcite for exhibition series (136705); 1 calcite crystal from California (136885); 1 green spodumene from Brazil (137009); 6 specimens of crystallized uraninite from Chestnut Flats mine, Spruce Pine, N. C. (137042); 2 specimens of opalized cones (137147); 2 specimens of cosalite and 1 each of topaz, stephanite, and schirmerite (137467); 1 specimen of uraninite and 1 of purpurite (137468).

CARBORUNDUM Co., Niagara Falls, N. Y.: Model of kiln used in making carborundum grinding wheels (136107).

CARCELLES, ALBERTO. (See under Museo Argentino di Ciencias Naturales.)

CARNEGIE INSTITUTION OF WASHINGTON, Washington, D. C.: (Through Dr. C. Wythe Cooke) 24 specimens of Eocene limestone containing Foraminifera from Belize River at Double Run, British Honduras (136292).

CARNEGIE INSTITUTION OF WASHINGTON, Division of Plant Biology, Stanford University, Calif.: (Through Dr. D. B. Keck) 118 plants (135490).

CARNEGIE MUSEUM, Pittsburgh, Pa.: 57 ferns from Utah (137924, 139311;

exchange); collection of Carboniferous limestone slabs with Ostracoda (138705).

CARR, Dr. H. P. (See under Comision de Malaria de Cuba.)

CARRIÓN, Dr. CLODOVEO, Loja, Ecuador: 25 crabs, 18 reptiles and amphibians, 4 fishes, 1 scorpion, and 1 beetle (135664).

CARROLL, W. R., Washington, D. C.: 3 fishes from Chesapeake Bay near mouth of Rappahannock River (136427).

CARTWRIGHT, B. W., Winnipeg, Manitoba: 3 Baird's sparrows (135221).

CARTY, A. B., Washington, D. C.: 1 set of lock quoins and 1 set of non-slip quoins (137457).

CATCHINGS, T. F., New Orleans, La.: 12 amphipods (135464).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Father Hugh O'Neill) 128 plants (137451, 138658; exchange).

CHACE, Dr. F. A., Jr. (See under Harvard University, Museum of Comparative Zoology.)

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 1 specimen of andalusite and 1 precious topaz (135275); 196 mollusks (136463, 139050); 84 Cuban shells purchased from Daniel Lopez, Maisi, Cuba (136993); 60 land and marine shells (8 species) from the Philippines (138745); about 15,000 Cerions, received from Mrs. Adda Allen and collected in the Bahamas by C. C. Allen (139804).

CHAMBERLIN, H. S., Washington, D. C.: Special-delivery airmail cover carried on first American rocket airplane and postmarked "Hewitt, N. J., Feb. 23, 1936" (138774).

CHAMPION SILLIMANITE, INC., Laws, Calif.: 3 specimens of augelite from Champion Spark Plug Co.'s mine, Mono County, Calif. (135304, 136155; exchange).

CHANCE VUGHT AIRCRAFT, East Hartford, Conn.: Model,  $\frac{1}{8}$  size, of the Vought VE-7 airplane designed for advanced training of military aviators, 1918 (135823).

CHANDLER, Prof. A. C. (See under Rice Institute.)

CHAPIN, Dr. E. A., Washington, D. C.: 1 fish from aquarium (138213); 1 eastern hermit thrush (139304).

CHAPIN, Mrs. F. L., Washington, D. C.: Sevres ormolu vase and pedestal base purchased in 1880 (139701).

CHARLESTON MUSEUM, Charleston, S. C.: (Through G. R. Lunz, Jr.) About 1,100 amphipods, 6 isopods, 50 anemones, 6 copepods, and 2 crabs

- (135202, 137388); 4 stomatopods from Isle of Palms (139508).
- CHASE, MRS. AGNES, Washington, D. C.: 1 fern from England (135937). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)
- CHEN, T. T., New Haven, Conn.: 26 frogs and toads from São Paulo, Brazil (136151).
- CHICAGO, UNIVERSITY OF, Chicago, Ill.: (Through Prof. J. M. Beal) 2 cultivated plants (135292, 135671).
- CHILEAN DEPARTMENT OF MINES AND PETROLEUM, Santiago, Chile: (Through Señor Don Manuel Trucco) Portions of a fossil South American mammal (135224).
- CHRIST, J. H. (See under University of Idaho, Agricultural Experiment Station.)
- CHRISTIANSEN, T. B., Charleston, S. C.: 100 amphipods, 3 lobsters, 10 porcelainids, 25 shrimps, 100 crabs, 1 sponge, and 4 marine annelids (139643).
- CHRYSLER, Prof. M. A. (See under Rutgers University.)
- CHUNG, Dr. H. H. (See under National Wuhan University.)
- CIFERRI, E., Santiago, Dominican Republic: 1 short-eared owl (138226).
- CLARK, A. H., Washington, D. C.: 1 nest and 3 young of chimney swift (135479); 32 Lepidoptera (135565).
- CLARK, Dr. H. C., Ancon, Canal Zone: 2 bats from Panama (138654).
- CLATWORTHY, F. P., Estes Park, Colo.: 3 autochromes entitled "Palm Cañon, California", "California Flower Fields", and "Cactus Blossoms" (136923).
- CLEMENS, MRS. JOSEPH, Rabaul, New Guinea: 49 plants from the Philippines (135958).
- CLOKEY, I. S., South Pasadena, Calif.: 22 ferns and grasses from Nevada (137429, exchange).
- CLOUD, P. E. (See under Smithsonian Institution, National Museum.)
- CLUJ, UNIVERSITY OF, Cluj, Rumania: 300 plants from Rumania (12th to 14th centuries) (138220, exchange).
- COCHRAN, Dr. DORIS M., Washington, D. C.: 1 waxbill (138334); 1 box turtle from Franklin, W. Va. (139562).
- COCKERELL, Prof. T. D. A., Boulder, Colo.: 26 African bees (14 species) (137211, exchange).
- COE, Mrs. H. C., Washington, D. C.: 5 samplers worked in cross stitch on wool and on linen to show the maker's accomplishment in decorative needlecraft (136738, loan).
- COE, Dr. W. R., New Haven, Conn.: 1 vial of amphipods (139644).
- COHEN BROS., Baltimore, Md.: Gold ore specimen from Thompson mine, Stanly County, N. C. (136953).
- COLEGIO BIFFI, Barranquilla, Colombia: 12 miscellaneous insects from Colombia (137179).
- COLEMAN, Dr. WARREN, New York City: Powder gourd carried by Robert Houston McEwen at the Battle of Horseshoe Bend, March 27, 1814 (139544).
- COLGATE UNIVERSITY, Hamilton, N. Y.: (Through Prof. H. O. Whitnall) About 100,000 Devonian invertebrate fossils from Hamilton formation of New York (136223, exchange).
- COLLIER, GEORGE. (See under Church of the Covenant.)
- COLLOM, Mrs. ROSE E., Payson, Ariz.: 247 plants from Arizona (135206, 136623, 137189).
- COLOM, J. L. (See under V. G. Berthier.)
- COLORADO MUSEUM OF NATURAL HISTORY, Denver, Colo.: 1 slice of the Norfolk, Ark., iron meteorite (135915, exchange).
- COMBS, J. A. (See under Royal Palm Nurseries.)
- COMMERCE, U. S. DEPARTMENT OF:  
*Bureau of Fisheries*: 1 fish from Chesapeake Bay collected by C. J. Robinson (136129); 33 mollusks (3 species) from Apalachicola Bay, Fla., collected by R. O. Smith (136195); 1 crab with an abnormal claw (136321); 739 fishes, mollusks, 3 turtles, 45 insects, and 82 invertebrates (136947); 22 mounted slides of flatworms (137232); 4 crabs taken by the *Albatross II* (138777); 1 catfish from Mississippi River at La Crosse, Wis. (139479); (through Gordon Gunter) 32 marine gastropods from Florida (139155); (through J. S. Gutsell) 14 Crustacea (136580, 137004); (through Dr. A. W. Herre) 14 lots of alcyonarians, hydrocorals, and hydroids collected by the *Albatross* in Japanese waters in 1906 (136125); (through Dr. S. F. Hildebrand) 50 shells from Panama (139392); (through Dr. A. S. Pearse) 70 crabs, 25 shrimps, 4 ascidians, 3 fishes, 34 isopods, 64 amphipods, 2 porcellanid crabs, 15 ostracods, 2 marine annelids, 1 mollusk, 2 holothurians, and 1 lot of Bryozoa (134932, 137478, 137479, 137780, 138527, 138756); collection of amphipods, isopods, shrimps, and crabs (136609); collection of tanaisids (136622); 65 amphipods, 18 isopods, 9 crabs, 10 shrimps, 6 hermit crabs, 3 marine annelids, 3 flatworms, 1 sipunculid worm, and 249



- mollusks from Florida (136942); types of 10 new species of polyclad worms (137917); mounted type of a flatworm (138697); 33 Crustacea, 2 mollusks (137926); 1 flatworm from Apalachicola, Fla. (139507); (through G. W. Wharton, Jr.) 8 turtles from Florida (138494, 139152); 4 turtles from Beaufort, N. C. (139497).
- Bureau of Foreign and Domestic Commerce*: 1 small wood sample of "huanacaxtle" from Mexico (136478); 1 wood sample each of Mexican yellow cedar and South African stinkwood (138717).
- National Bureau of Standards*: 1 small billet of tung wood from a tree grown in Wilson Farm Nursery, Gulfport, Miss. (136515).
- COMMERFORD, LEON, Washington, D. C.: Florence sewing machine bought in Mobile, Ala., in 1870 (137959).
- COMSTOCK, DR. JOHN, Los Angeles, Calif.: 7 paratypes of Lepidoptera (3 species) (136742).
- CONGER, MRS. MARGARET G., Takoma Park, Md.: Paisley shawl purchased in Great Britain between 1850 and 1860 (138588).
- CONGER, P. S., Washington, D. C.: Diatomite-top, nonclogging salt server (137992).
- COOK, A. N., New York City: 2 pieces of coach lace woven by Erastus B. Bigelow about 1837 (139150).
- COOK, DR. E. F. (See under U. S. Pharmacopoeial Convention, Inc.)
- COOK, FANNYE A. (See under Mississippi State Game and Fish Commission.)
- COOK, W. P., San Diego, Calif.: 6 shells from San Diego (138604).
- COOKE, DR. C. WYTHE, Washington, D. C.: 2 land shells from Uaxactum, Guatemala (135233). (See also under Carnegie Institution of Washington.)
- COOLEY, MRS. HELEN C., Washington, D. C.: 1 hand-woven coverlet and a pillow top made by "Weaver Rose" of Kingston, R. I., linen sampler worked July 23, 1806, by Susanna Martin, and a small knitted bead purse made in 1845 by Susan Sanger Cooper Curtice, Montville, Cayuga County, N. Y. (139516, loan).
- COOPER, DR. G. A., Washington, D. C.: 1 shell from 1 mile west of Rye Cove, Va. (138498). (See also under Smithsonian Institution.)
- COOPER, REV. J. V., Lynbrook, N. Y.: 2 spring lancet blades used by Dr. John Cooper, Easton, Pa., the donor's great-grandfather (139877).
- COPELAND, DR. E. B., Berkeley, Calif.: 3 ferns from the Philippines (135936, 138221; exchange); 1 plant (137409, exchange).
- CORNELL UNIVERSITY, Ithaca, N. Y.: 1 South Trinidad petrel (139393, exchange).
- CORN PRODUCTS REFINING Co., Edgewater, N. J.: 6-ounce specimen of corn oil, U. S. P. XI (139565).
- CORY, V. L., Sonora, Tex.: 6 plants from Texas (136130).
- COSTAIN, MRS. W. A., Toronto, Ontario: 4 photographs: 2 framed panoramas of the city of Washington taken from Smithsonian tower about 1875, 1 of the Smithsonian Institution, and 1 of the White House (134424).
- COTTAM, CLARENCE. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)
- COTTON-TEXTILE INSTITUTE, Inc., New York City: 35 specimens of cotton fabrics produced by American manufacturers for fall and winter of 1935 (136220); 38 specimens of cotton textiles produced by American manufacturers for spring and summer of 1936 (139519).
- COUGHTRY, W. J. (See under Delaware & Hudson Railroad.)
- COURT, E. J., Washington, D. C.: 1 set of 9 eggs of Java tree duck (135851).
- COVENANT, CHURCH OF THE, Washington, D. C.: (Through George Collier) An early radio broadcasting transmitter of about 1922, of Station WMD (139908).
- COVILLE, DR. F. V. (See under U. S. Department of Agriculture, Bureau of Plant Industry; and Pomona College.)
- COX, DR. IAN, Cambridge, England: 2 specimens and thin sections of early Silurian corals from Akpatok Island, Northwest Territories (136275). (See also under Sedgwick Museum.)
- COX, P. B., Sutherlin, Va.: Otter skull from Baksdale Depot, Va. (137731).
- CRANMER, C. R., Washington, D. C.: Mounted head of Olympic wapiti (136497).
- CRAWFORD, DR. G. I., Plymouth, England: 33 amphipods (135592, exchange); 25 amphipods from Canale Guidessa, Venice, Italy (138343).
- CRAWFORD, V. D., Redondo Beach, Calif.: 3 phyllopods (134795).
- CROPLEY, R. E., New York City: Cigarette box made of oak from the dining saloon of R. M. S. *Mauretania*, 1935 (136877).
- CUATRECASAS, DR. JOSÉ. (See under Jardín Botánico.)
- CUBA, COMISION DE MALARIA DE, Habana, Cuba: (Through Dr. H. P. Carr) 141 mosquitoes, adult and larvae, from Cuba (138599).

- CURRY, CORA C. (See under Lottie M. Bausman.)
- CURRY, Dr. D. P., Balboa Heights, Canal Zone: 14 Diptera (134803).
- CURTICE, Dr. COOPER, Fairfax, Va.: Portions of a hand-woven cotton and wool coverlet, in a modified "Snowball" pattern, made in England about 1800 and owned by the donor's family (139521).
- CUSTER, ELIZABETH B., New York City: Mementos of the surrender of the Army of Northern Virginia at Appomattox Court House, Va., April 9, 1865 (124419, bequest); mementos of the military career of Maj. Gen. George A. Custer (139684, deposit).
- DAMMERS, Comdr. C. M., Riverside, Calif.: 108 Lepidoptera (17 species), mostly rare (137072); (through August Busck) 190 insects, including 150 Lepidoptera comprising paratypes and many reared species; 30 reared parasitic Hymenoptera, 8 Diptera, and 2 paratypes of Homoptera (136737).
- DANFORTH, Prof. S. T., Mayaguez, Puerto Rico: 3 crabs, 3 shrimps, 2 mysids, and 3 insects (134869); 2 hawks (136425, part deposit).
- DANIEL, Rev. Brother, Medellin, Colombia: 24 ferns from Colombia (136053); 60 miscellaneous insects from Colombia (136731); 176 plants from Colombia (137088).
- DANNER, Mrs. SCIOTO, El Dorado, Kans.: Cotton applique quilt, "Prince's Feather", made in Kentucky in 1829 and carried by an ox team to California during the gold rush in 1853 (137033, loan).
- DANSKE ARKTISKE STATION, Via Copenhagen, Denmark: 120 plants from Greenland (135462, exchange).
- DARLING, CYRUS, Westboro, Mass.: 1 tick taken from a cat (139462).
- DA ROCHA, Prof. DIAS, Ceara, Brazil: 90 miscellaneous insects (133969).
- DARROW, R. A., Chicago, Ill.: 49 plants from United States (139186).
- DAVIDSON, OLIVER, Washington, D. C.: Model,  $\frac{1}{16}$  size, of a current type of Naval airplane, the F-11-C-2, used mainly in connection with aircraft carrier operations at sea (135285, loan).
- DAVIS, CYNTHIA, Washington, D. C.: 1 Venus flowerbasket sponge (138942).
- DAVIS, GERTRUDE B. (See under Mrs. Charlotte P. Scruton.)
- DAVIS, H. T., Raleigh, N. C.: Meteorite specimen from Farmville, N. C. (136890, exchange).
- DAVIS, W. T., Staten Island, N. Y.: 16 cicadas (8 species, 2 represented by 2 paratypes each) (138038).
- DAVIS & GIST, McIntosh, Fla.: 7 plants from Florida (138781).
- DAVY, Dr. J. B. (See under Oxford University, Imperial Forestry Institute.)
- DAWE, Mrs. CYNTHIA, Washington, D. C.; Carved and painted ivory fan, English, 18th century (138496).
- DAY, S. S., Morristown, N. J.: Large piece of radiolarian earth from Barbados (136553).
- DEAM, C. C., Bluffton, Ind.: 1 plant from Indiana (137741, exchange).
- DEGENER, OTTO, Honolulu, Hawaii: 205 plants from Hawaii (136643, 136706, 137090, 137994, 139061, 139185).
- DEISS, Dr. CHARLES. (See under University of Montana.)
- DELANO, FREDERIC A., Washington, D. C.: 33 etchings on ivory and whalebone collected by Mr. and Mrs. Delano in various parts of the world during the past 50 years (136263).
- DELAWARE & HUDSON Co., New York City: (Through W. J. Coughtry) 80 blueprints and 6 photographs of the full-size reproduction of the locomotive *Stourbridge Lion* made by the Delaware & Hudson Railroad in 1932-33 (137204).
- DEMAREE, DELZIE, Yellow Springs, Ohio: 420 plants from Ohio (136934, 137152, 137368); 281 plants from Arkansas (137434, 137979); 558 plants from Ohio and Arkansas (138366). (See also under University of Oklahoma.)
- DEMERRITT, W. W., Key West, Fla.: about 200 mollusks (136112).
- DENLEY, C. F., Rockville, Md.: 1 Argus pheasant (136225).
- DENNING, Dr. L. L., Litchfield, Conn.: 1 insect (135093).
- DE PUE, Mrs. A. J. B., Washington, D. C.: American pistol made about 1845 (136048). (See also under Mrs. Mary R. Roberts.)
- DETRICH, ELIZABETH, St. Louis, Mo.: Six 1-mill and two 5-mill tax tokens in current use in Missouri (136310).
- DETWELER, S. B. (See under U. S. Department of Agriculture, Soil Conservation Service.)
- DE VOL, C. E., Luho, Kiangsi, China: 40 ferns from China (136453).
- DIAZ, EMMANUEL, Rio de Janeiro, Brazil: Collection of mammals, amphibians, fishes, and insects (135003).
- DISTRICT OF COLUMBIA BOARD OF EDUCATION, Washington, D. C.: The master movement and 2 individual clocks of a pneumatic clock system from an old installation in the Jefferson Junior High School (137407).
- DIXON, JOSEPH, CRUCIBLE Co., Jersey City, N. J.: Group of manufactured products containing graphite (136108).



- DODELL, Mrs. W. D., Jacksonville, Fla.: 6 living ferns from Florida (137410).
- DODDS, Dr. G. S., Morgantown, W. Va.: 25 phyllopods (137356).
- DODGE, Mrs. OZIAS, Norwich, Conn.: 59 specimens relating to the Ozias Dodge methods of producing printable surfaces; including catalogs, magazines containing notices, personal notebooks, a scrapbook on exhibitions, negatives, and sheets of gelatine film (135676).
- DODGE & OLCOTT Co., Bayonne, N. J.: 1 specimen each of thymol and of oils of anise, bay, peppermint, spearmint, and wintergreen, for addition to the materia medica collection (136114).
- DOERING, KATHLEEN C., Lawrence, Kans.: 4 paratypes of 2 species of leafhoppers (118641, exchange).
- DOHERTY, R. E., Peekskill, N. Y.: 1 orange calcite from Bear Mountain, N. Y., and 1 augen gneiss from Peekskill, N. Y. (135835).
- DONAHAY, SYLVIA, Washington, D. C.: 1 spider from District of Columbia (136517).
- DONNELLEY, R. R., & SONS Co., Chicago, Ill.: Advertising sample, including 2 illustrations by Bill Welsh, done in Donnelley deepstone (5 colors) (138495).
- DORSMAN, B. A., Eindhoven, Netherlands: 50 amphipods (139361, exchange).
- DOS PASSOS, C. F., Mendham, N. J.: 8 Lepidoptera (5 species) five of which are paratypes of 3 species (133267).
- DOUGAL, KATHARINE, Washington, D. C.: 1 Hispano-Moresque pitcher (137968, loan).
- DOZIER, Dr. H. L., Mayaguez, Puerto Rico: 2 slides of insect material (139054).
- DRAKE, Prof. C. J., Ames, Iowa: 3 paratypes of 2 species of insects from the Orient (138342).
- DRAKE, W. H., Mount Dora, Fla.: 1 sample of grapefruit wood from Lake County, Fla. (139055).
- DRESCHER, F. C., Bandoeng, Java: 55 beetles (20 species) (135123).
- DUBOIS, R. E., Summit Point, Utah: Sandals, bowl fragment, and net fragments from rock shelters near Summit Point, San Juan County (138332).
- DUGAND G., Dr. ARMANDO, Barranquilla, Colombia: 14 birds from Colombia (125073); 28 plants from Colombia (136128, 138709, 139388); 50 birds from Colombia (138454).
- DUKE UNIVERSITY, Durham, N. C.: 13 orchids from North Carolina (139524, exchange).
- DUNN, Dr. E. R., Haverford, Pa.: 1 salamander and 1 turtle from Giles County, Va. (139814).
- DYER, ALBERT, Washington, D. C.: 1 spider (136315).
- EAST, C. S. (See under Smithsonian Institution.)
- EASTON, W. H., Washington, D. C.: A piece of hard clay with burrows of specimens of mollusks from Plum-point, Chesapeake Bay, Md. (137906).
- EBERLE, Dr. E. G. (See under American Pharmaceutical Association.)
- EDMONDSON, Dr. C. H., Honolulu, Hawaii: 4 shells from Kaneohe Bay, Oahu, Hawaii (136124); 6 crustaceans from Hawaii (136624); 2 Hawaiian marine pelecypods (137002); 10 amphipods (137921).
- EDWARDS, J. B., Tegucigalpa, Honduras: (Through J. N. Gowanlock) Skin of a water opossum from Siguatepeque, Honduras (135166).
- EHRMANN, M. L., New York City: 1 Australian opal and 1 spodumene from Brazil (137041, exchange); 1 specimen each of malachite, anglesite, cerussite, smithsonite, and olivenite from Tsumeb, Southwest Africa (139235, exchange).
- ELIAS, Rev. Brother, Barranquilla, Colombia: 49 plants from Colombia (136922).
- ELLSWORTH, LINCOLN, New York City: The Northrop airplane *Polar Star*, which was used by the donor in the Antarctic, 1934 and 1935, and in which, November 23-December 5, 1935, piloted by Herbert Hollick-Kenyon, he made a 2,300-mile transantarctic flight with 5 landings, from Dundee Island to a point 16 miles from Little America (139494).
- EMBRY, Judge ALVIN T., Fredericksburg, Va.: 2 pigs of iron from Spottswood Furnace, established by Gov. Alexander Spottswood near Fredericksburg before 1800 (135359).
- ENDERLEIN, Dr. GUNTHER, Berlin, Germany: 1 fly (137043, exchange).
- ENDERS, Mrs. T. B., Mystic, Conn.: Oil painting by Frederick K. Detwiller showing the house of Joshua Hett Smith near Haverstraw, N. Y., in which Benedict Arnold and Maj. John André met in 1780 to plot for the surrender of West Point to the British forces (137868).
- ENGLISH, G. L., Rochester, N. Y.: 25 pyroxmangites from Iva, S. C. (136403, exchange).
- ENGLISH, P. H. (See under New Haven Clock Co.)
- EPLING, Dr. CARL. (See under University of California, Los Angeles.)

- EPPS, J. B., Annapolis, Md.: Lower jaw of a Miocene sperm whale from near Boy Haven, Chesapeake Bay (135099, exchange).
- ERLANSO, C. O., Washington, D. C.: 20 mosses from Virginia and Maryland (138773). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)
- ESTACION EXPERIMENTAL AGRICOLA DE LA MOLINA, Lima, Peru: (Through Dr. J. Wille) 4,133 flies, of which 1,926 are classified, collected by Dr. C. H. T. Townsend in South America (136208, exchange).
- EWERS, Mrs. W. V., Somerset, Bermuda: (Through Mrs. Harriet Vaux B. Thompson) 16 pieces from a set of Haviland china, inscribed "Manufactured by Theodore Haviland Limoges, France, for Mrs. William Vaux Ewers from Major William Vaux Ewers, M. C., U. S. A., 1918-1919" and marked with the initials "A. B. E." (138118, bequest).
- EWING, Dr. H. E., Washington, D. C.: 44 amphibians and reptiles from Maryland (139564).
- EXLINE, HARRIET, Seattle, Wash.: 20 pycnogonids, including types of 3 new species (138528).
- FAIRCHILD, G. B., Monticello, Fla.: 15 flies (5 species, 3 of which are represented by 8 paratypes) (136038).
- FAIRCHILD AIRCRAFT CORPORATION, Hagerstown, Md.: Model,  $\frac{1}{8}$  size, of the Fairchild amphibian airplane, type 91, a current type familiarly known as the *Baby Clipper* and intended primarily for use on river routes of airway systems (139518).
- FAIREY AVIATION Co., Ltd., Hayes, England: An airplane propeller of the type used on the Super-marine S-6 seaplane, which won the Schneider Trophy Race of 1929 (136105).
- FAIRMAN, C. E., Washington, D. C.: 1 roll of film dated March 1, 1912, in original box made by Goodwin Film & Camera Co., of Binghamton, N. Y. (139371).
- FAN MEMORIAL INSTITUTE OF BIOLOGY, Peiping, China: (Through Dr. S. C. Yu) 5 amphipods (138029, exchange).
- FEDERIGHI, HENRY, Fort Lavaca, Tex.: 10 shells (135559).
- FELIPPONE, Dr. F., Montevideo, Uruguay: 4 isopods, 2 parasitic copepods, 1 hippa, and 450 mollusks (135468); 1 medusa, 3 parasitic isopods, and 1 echinoderm (136268).
- FERRIERE, Dr. CH. (See under British Government, British Museum.)
- FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: 5 skeletons of birds from West Africa (134121); 164 mammals from South America, Africa, and Asia (134143); 73 small mammal skins with skulls from Asia, Africa, and South America (135653); 61 Old World rodent skins with skulls (135855); 450 plants, chiefly from tropical America (136408); 1 photograph of a plant (137448); a composite skeleton of the ground sloth from the Pleistocene of Tarija, Bolivia (137722); 48 bat skins with skulls and 1 odd skull and 172 bats in alcohol (137890); 1 plant and photograph (139071); 2 plants from Hawaiian Islands (139085). All exchange.
- FISCHER, E. G., Washington, D. C.: 1 lithograph "Die eingetretene Besserung", work of donor's father (135176).
- FISHER, Dr. A. K., Washington, D. C.: 53 bird skulls (136983).
- FISHER, G. L., Houston, Tex.: 395 plants from Texas and Mexico (135146, 136095, 136950, 136991).
- FISHER, W. S. (See under E. D. Quirsfeld.)
- FITTS, C. N. (See under Estate of Mary A. Taylor.)
- FLECK, Dr. C. E., New York City: (Through Dr. R. D. Moore) U. S. Patent Office specification for an improved method of articulating the human skeleton, Patent no. 983547; also a photographic reproduction of a letter written by Dr. A. T. Still, September 18, 1911 (139151).
- FLECKENSTEIN, LOUIS, Long Beach, Calif.: 30 pictorial prints (137759).
- FLEMING, R. S., Nashville, Tenn.: 10 amphipods (138688).
- FLETCHER, Mrs. H. A. (See under Mrs. Virginia W. Hillyer.)
- FLORIDA REPTILE INSTITUTE, Silver Springs, Fla.: (Through E. R. Allen) 5 turtles from Florida (139073).
- FLORIDA STATE CONSERVATION DEPARTMENT, *Geological Division*, Tallahassee, Fla.: (Through Dr. Herman Gunter) 1 fossil crab from Eocene of Florida (135209).
- FLORIDA, UNIVERSITY OF, Gainesville, Fla.: A small collection of beetles from Miami, Fla. (136629); (through H. B. Sherman) 3 ectoparasites taken from a free-tailed bat collected at Gainesville (138241); (through Dr. A. N. Tissot) 4 flies (135477).
- Agricultural Experiment Station*: 27 flies (134603); (through Dr. A. N. Tissot) 3 moths from Florida (134835); 57 specimens and 3 photographs of plants (135917).
- FLORIDA SOCIETY OF LEPIDOPTERISTS, Miami, Fla.: 2 butterflies (135489).



- FORCE, EDITH A.**, Tulsa, Okla.: 6 worm-snakes from Tulsa (135640).
- FORD, H. A.**, Boston, Mass.: 1 specimen of andradite, variety of jellite, from Switzerland (137902); 1 large crystallized stibnite from Rumania and 1 fluorite specimen from Rodderup Fell mine, Alston, Cumberland, England (138487).
- FORT DEARBORN CAMERA CLUB**, Elmhurst, Ill.: 44 pictorial prints by H. K. Sigeta for special exhibition during November 1935 (136739, loan); 51 pictorial photographs by members of the club, exhibited December 1935 (137097, loan).
- FORTIE, M. J.**, Washington, D. C.: 1 mounted Hartlaub's turaco (139648).
- FOSHAG, Dr. W. F.**, Washington, D. C.: 6 archeological specimens from various localities in Mexico collected by donor in 1934 (139480).
- FOSTER, CLARENCE.** (See under Bacone College.)
- FOSTER, M. B.**, Orlando, Fla.: 1 plant from Mexico (139246).
- FRANKENBERRY, C. R.**, Martinsburg, W. Va.: Specimen of crinoid from the Oriskany formation, Berkeley, W. Va. (135068, exchange).
- FRANSSSEN, Dr. C.**, Buitenzorg, Java: 5 Neolithic stone hatchets found near Buitenzorg (138030, exchange).
- FRAPPIE, F. R.**, Boston, Mass.: 56 pictorial photographs for exhibition September 1935 (135849, loan).
- FRASER, LILIAN**, Sydney, New South Wales: 32 plants (136755).
- FREEMAN, O. M.**, Washington, D. C.: 3 plants from Virginia and Maryland (136409, 138637); 1 wood specimen of Hercules-club, collected by donor (139872). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)
- FRITZSCHE BROS., Inc.**, New York City: 1 specimen each of eucalyptol, oil of cajuput, oil of cloves, oil of eucalyptus, and oil of pimenta, for addition to the materia medica collection (136046).
- FROST, C. A.**, Framingham, Mass.: 204 miscellaneous insects, 1 parasitic worm (136051, 136740, 136971); military canteen of early part of 19th century (136759).
- FROST, RUTH and ROSEMARY**, Washington, D. C.: Icelandic spoon box dating from 1685 (135163, loan).
- FULTON, H. C.**, London, England: 1 mollusk (136741).
- FULTON, Dr. J. F.** (See under School of Medicine, Yale University.)
- FULTS, JESS.** (See under U. S. Department of Agriculture, Soil Conservation Service.)
- FUNKHOUSER, E. N.**, Hagerstown, Md.: \$5 note of Valley Bank of Maryland, dated January 31, 1856 (137208).
- FURTOS, Dr. NORMA C.**, Cleveland Heights, Ohio: 26 vials and 23 slides of ostracods from Florida, including types and paratypes of 10 new species and type of 1 new variety; 15 vials and 12 slides of ostracods from Massachusetts, including types and paratypes of 3 new species and types of 2 new varieties (138231).
- GAERSTE, Dr. THOMAS**, Curaçao, Dutch West Indies: Specimen of cultivated plant from Curaçao (137490).
- GARDNER, Mrs. DANIEL**, Newburgh, N. Y.: Knitted shawls, scarf, infant's bonnet, and 2 embroidered flannel petticoats (135704).
- GARDNER, Dr. JULIA**, Washington, D. C.: 2 shells from Cane River, Natchitoches, La. (137757); with Edgar O. Bowles, 3 lots (43 specimens) of recent fresh-water and land shells from Indian mound, 1 mile north of Claiborne, Ala. (135151).
- GARDNER, W. A.**, Nampa, Idaho: 1 lot of natural glasses, possibly tektites, and 1 specimen of volcanic ash from near Nampa (139381).
- GARRETT, A. O.**, Salt Lake City, Utah: 107 mosses from Utah (137115).
- GATES, Dr. G. E.**, Rangoon, Burma: 30 fresh-water shrimps and 1 fish (137430).
- GENERAL BIOLOGICAL SUPPLY HOUSE**, Chicago, Ill.: (Through A. S. Windsor) 5 mollusks and 3 sipunculid worms (134716).
- GEOLOGISCH INSTITUUT DER UNIVERSITEIT VAN AMSTERDAM**, Amsterdam, Netherlands: 452 fossil mollusks and echinoderms from Permian of Island of Timor (125644, exchange).
- GEORGIA, UNIVERSITY OF**, Athens, Ga.: (Through Dr. Rogers McVaugh) 5 ferns from Georgia (138219, exchange).
- GERASIMOV, Dr. A. M.**, Leningrad, U. S. S. R.: 60 Lepidoptera (29 species, 13 of which are new to collection) (138347, exchange).
- GERITZ, FRANZ**, Los Angeles, Calif.: 62 prints, comprising 29 black-and-white block prints, 5 color block prints, 19 etchings, 5 woodcut illustrations, and 4 lithographs, for exhibition during January 1936 (137154, loan).
- GERTSCH, Dr. W. J.** (See under American Museum of Natural History.)
- GEYER, HANS**, Regensburg, Germany: (Through M. K. Brady) 39 salamanders from Italy and Sardinia (136514).
- GIANELLA, Prof. V. P.**, Reno, Nev.: 2 specimens of thulite from Pine Nut Mountains, Nev. (137143); 2 speci-

- mens of piedmontite from Peavine Mountain, Washoe County, Nev. (137373).
- GILBERT, C. M., University, Va.: 7 ostracods, 12 cladocerans, and 11 copepods (138456).
- GILBERT, Prof. F. A. (See under Marshall College.)
- GILMORE, C. W. (See under Smithsonian Institution, National Museum.)
- GINES, Rev. Brother, Barranquilla, Colombia: 14 miscellaneous insects from South America (135071).
- GLASS, KARL, Paris, Ark.: A miner's carbide lamp (138211).
- GLASSELL, S. A., Beverly Hills, Calif.: 12 porcellanid crabs (127203); 5 crabs (135210); 25 sharks' teeth and 2 spines from Pleistocene of Playa Del Rey, Calif. (138670).
- GLENN, Prof. L. C., Nashville, Tenn.: 3 shells (137386).
- GLENN, M. O., Magnolia, Ill.: 44 Lepidoptera (136724).
- GLOYD, Mrs. L. K. (See under University of Michigan, Museum of Zoology.)
- GODDARD, Dr. R. H., Roswell, N. Mex.: Experimental rocket for scientific investigations of the upper air, employing an automatic stabilizer for maintaining vertical flight, 1934-35 (136907).
- GODDING, Prof. L. N., Tucson, Ariz.: 1 plant from Arizona (139807).
- GOLDFARB, ISAAC, Washington, D. C.: Modern silver repoussé candelabrum from Austria (137098, loan).
- GOLDMAN, E. A. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)
- GOODRICH, B. F., Co., Akron, Ohio: 2 pairs of airplane tires from the airplane *Winnie Mae*, one from its second world flight, the other from a substratosphere flight (139907).
- GOODRICH, Prof. CALVIN. (See under University of Michigan, Museum of Zoology.)
- GORDON, Dr. ISABELLA. (See under British Government, British Museum.)
- GORGAS MEMORIAL INSTITUTE OF TROPICAL AND PREVENTIVE MEDICINE, Ancon, Canal Zone: 2 pinned mosquitoes and 4 slides of genitalia, larvae, and pupae mounts (138363).
- GOSLIN, R. M., Lancaster, Ohio: 25 insects (137184).
- GOWANLOCH, Dr. J. N., New Orleans, La.: 2 flatworms (136144). (See also under J. B. Edwards.)
- GRAF, Mrs. D. W., Washington, D. C.: 1 moth from District of Columbia (135126).
- GRAF, J. E., Washington, D. C.: 1 half-tone reproduction of drawing "Clipper Ships" by E. A. Burbank (137745).
- GRAHAM, Dr. D. C., Changtu, Szechwan, China: 11,763 insects, 10 mammals, 4 frogs, 5 snakes, 7 lizards, 8 fishes, 1 earthworm, 2 planarians, 3 vials of mollusks, and 8 fossils from China (134855, 135189, 135478, 135870, 136433, 136621, 137148).
- GRAHAM, H. L. (See under North Texas State Teachers' College.)
- GREELEY, Mrs. HULDA, Albany, N. Y.: 5 specimens of "gizzard shad" (138640).
- GREELEY, JOHN R. (See under New York State Conservation Department.)
- GREELY, CHILDREN OF Maj. Gen. ADOLPHUS W. (Antoinette Greely, Adola Greely Adams, John Nesmith Greely, Rose Ishbel Greely, Adolphus Washington Greely, and Gertrude Greely Shedd), Washington, D. C.: (Through Col. John N. Greely) Mementos of the Lady Franklin Bay Arctic Expedition, 1881-1884, commanded by Maj. Gen. (then Lt.) Adolphus W. Greely, U. S. Army, and miscellaneous relics owned by him (55 specimens) (138734, loan).
- GREELY, J. C., Washington, D. C.: (Through Col. John N. Greely) Medal of honor awarded by the Congress of the United States to Maj. Gen. Adolphus W. Greely, U. S. Army, for his life of splendid service (139179, loan).
- GREELY, Col. JOHN N. (See under Children of Major General Adolphus W. Greely and J. C. Greely.)
- GREEN, Mrs. THOMAS, Moravia, N. Y.: An all-white "tufted" weave counterpane, of the late 18th century, collected in Vermont (139496, loan.)
- GREENE, E. R., New Holland, N. C.: (Through U. S. Department of Agriculture, Bureau of Biological Survey) 1 eastern Savannah sparrow (137905.)
- GREENWOOD, J. R., New York City: Late 18th century pistol and early 19th century gold mourning ring (129662, bequest.)
- GRESSITT, J. L., Berkeley, Calif.: 8 holotypes of cerambycid beetles (138429.)
- GRIFFIN, Mrs. HUGH R., London, England: (Through Emily H. Peabody) Wax doll, H. R. H. Princess Elizabeth of York, modeled by a member of the Amateur Royal Art Society, dressed by donor; also a portrait of donor and a book entitled "The Story of Princess Elizabeth", by Anne Ring (138448.)
- GROLL, A. L., New York City: 44 etchings and drypoints for special exhibi-



- tion during April 1936 (138591, loan.)
- GROSS, RUDOLPH, Niederschonhausen-Berlin, Germany: 553 plants from Europe (138507, exchange.)
- GROUT, Dr. A. J., Manatee, Fla.: 1 plant from Louisiana (137411, exchange); 1 moss from Florida (137-742, exchange.)
- GRUMMAN, L. R., Farmingdale, Long Island, N. Y.: Model,  $\frac{1}{16}$  size, of the Grumman SF-1 airplane, in current use by the Third Scouting Squadron, U. S. Navy (136500.)
- GUARD, MADGE L. (See under Mattie G. Bullard.)
- GUEHLER, WILLIAM, Jr., Marysville, Kans.: Fossil seed from Coal Measures of Kansas (135932.)
- GULICK, Mrs. VIRGINIA, Washington, D. C.: Engagement nightcap made for mother of Galusha Grow, one-time Speaker of the House of Representatives, also an example of Hungarian needlepoint in form of a rosette (138935.)
- GUNNELL, L. C., Alexandria, Va.: 2 weasels and 2 robins from Fairfax County, Va. (135308, 138202, 139390.)
- GUNTER, GORDON, Moreauville, La.: Type of a new species of sole from Apalachicola, Fla. (138424). (See also under U. S. Department of Commerce, Bureau of Fisheries.)
- GUNTER, HERMAN. (See under Florida State Conservation Department.)
- GURJANOVA, Dr. EUPRAXIE. (See under Academy of Sciences, Leningrad, U. S. S. R.)
- GURNEE, BELL, Washington, D. C.: Large Italian chest of black wood inlaid with bone and ivory (137967).
- GURNEY, ROBERT, Oxford, England: 3 shrimps from Burmuda (137073).
- GUTHRIE, W. H., Alexandria, Va.: Copper powder flask of about 1850 (138708).
- GUTSELL, J. S., (See under U. S. Department of Commerce, Bureau of Fisheries.)
- HAAS, Dr. F. (See under Senckenbergische Naturforschende Gesellschaft.)
- HAAS, FLORA C. (See under Arkansas State Teachers' College.)
- HALL, Dr. G. M., Knoxville, Tenn.: 1 specimen of oligoclase from near Booneville, N. C. (138712).
- HANCOCK, Capt. G. ALLAN, Los Angeles, Calif.: 6 seal skulls (135007); skull of a porpoise from Gulf of California taken by Hancock Expedition (139370).
- HANSTROM, Dr. BERTILL, Englewood, Fla.: 7 crabs, 13 shrimps, and 2 hermit crabs (136676).
- HARDISTY, A. H., Beltsville, Md.: 1 Virginia opossum (138203).
- HARGADEN, MARY J., Syracuse, N. Y.: Bronze halfpenny (1932), 1 penny (1900), and silver florin (1927) of the Australian Commonwealth (137178).
- HARGRAVES, Mrs. SARA, New York City: A surface flare, a hand-operated water pump, and a fragment of a wing rib, all salvaged from the U. S. Naval seaplane NC-3, flagplane of the first trans-Atlantic air squadron, 1919 (135805).
- HARGRODER, RIVERS, Minden, La.: Potsherd series from near Homer, Claiborne County, La. (137822).
- HARMAN, Mrs. ELIZABETH W. (See under Mrs. Eleanor W. Bisell.)
- HARPER, FRANCIS, Swarthmore, Pa.: 1 shrimp from Georgia (137172).
- HARPER, Dr. R. M., University, Ala.: 50 plants, mostly from Alabama (136687, exchange).
- HARRIS, G. W., Washington, D. C.: 1 framed colored portrait, paper print from a paper negative (138643); 52 portraits of notables of 30 years ago for exhibition during April 1936 (138943, loan).
- HARRISON, Capt. J. B., Tilghman, Md.: Original half model of the bug-eye *Triumph*, designed and built by donor in 1893, and a half model of a Chesapeake Bay motor cargo boat also of his design (135225).
- HARTMAN, OLGA, Berkeley, Calif.: 24 marine annelid worms, including types of 8 new species and 1 paratype of one of the new species (138693); 8 lots of marine annelids, including types of 5 new species and paratypes of 2 new species (139146).
- HARVARD UNIVERSITY:  
*Arnold Arboretum*, Jamaica Plain, Mass.: 125 plants collected in Guatemala by Dr. A. F. Skutch (137022, 137205); 19 plants from Asia (138369, 139445). All exchange.  
*Farlow Herbarium of Cryptogamic Botany*, Cambridge, Mass.: 669 plants (137181, exchange).  
*Gray Herbarium*, Cambridge, Mass.: 47 plants from southeastern Virginia (135950); 67 plants from coastal-plain region of Virginia (136317); 21 photographs of ferns (137008, 137087); 13 plants from Brazil (138355, 139174); 25 plants (138476); 672 plants and 241 photographs of types of Bromeliaceae (138651); 81 photographs of fern specimens in European herbaria (139309, 139545). All exchange.  
*Department of Mineralogy and Petrology*, Cambridge, Mass.: 2 slabs of chlorite schist with pyrite and

- magnetite from Chester, Vt. (138714 exchange).
- Museum of Comparative Zoology*, Cambridge, Mass.: 13 beetles (10 species) (135481, exchange); 2 marsh wrens (135892, exchange); 2 hawks (136598, exchange); 1 Guatemalan sparrow hawk (139111, exchange); 15 amphipods (139360); 1 Zapata rail (alcoholic) (139798, exchange); (through Dr. F. A. Chace, Jr.) 2 crabs (138738).
- HASTINGS, S. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- HATCH, W. R., Baltimore, Md.: 37 ferns from Jamaica (133861).
- HAUGHT, OSCAR, El Centro via Baranca Bermeja, Colombia: 2,002 plants from Colombia (135237, 137920).
- HAWAII AGRICULTURAL EXPERIMENT STATION, Honolulu, Hawaii: (Through Dr. J. E. Alicata) About 30 amphipods and 8 isopods (138473).
- HAWAIIAN SUGAR PLANTERS' ASSOCIATION, Honolulu, Hawaii: (Through O. H. Swezey) 20 Hymenoptera (12 species, 3 new to the collection) (136041).
- HAWKINS, A. C., Washington, D. C.: 1 specimen of glauconite (cavities) in Triassic shale, from Milltown, Somerset County, N. J. (136876).
- HAY, Dr. W. P., Kensington, Md.: Miscellaneous zoological material, comprising crustaceans (including microscopic slides), reptiles, fishes, mollusks, echinoderms, bird and mammal skins and skeletons, and a few fossils; also a large number of books and periodicals on related subjects (136126); a microscopic slide mount of a tardigrade (136261).
- HAYWARD, WYNDHAM, Winter Park, Fla.: 2 specimens and 1 photograph of plants (139632).
- HEATH, Dr. HAROLD, Pacific Grove, Calif.: 1 vial of ostracods (138340).
- HEDGES, R. F., Norman, Okla.: 4 mollusks (134857).
- HEISS, Miss E. M., Urbana, Ill.: 5 Diptera (1 adult, 1 larva, 3 puparia) from Oakwood, Ill. (137171).
- HEISS, E. W., Washington, D. C.: Nicely made model of a road scraper of 1894 (136522); hayfork of second-growth white oak, made about 1879 by John Heiss, Lima Township, La Grange County, Ind., used in feeding stock and for handling clover and short straw of all kinds (137459); small round wooden measure used in 1845 by William Heiss, La Grange County, Ind., to feed small grain or mill feed to livestock, and a half-bushel measure made in May 1829 and used on the farm of William Heiss, grandfather of the lender (137960, loan).
- HELMS, Mrs. MAY W., and C. M. WHITNEY, Jr., New York City: Baton made from one of the timbers of the U. S. frigate *Constitution* (137551).
- HENDERSON, Prof. JUNIUS, St. Petersburg, Fla.: 7 mollusks from St. Petersburg (136748).
- HERB, JOHN and ELMER, Tower City, Pa.: 6 spiders (5 species) (135458).
- HERMANN, F. J., Ann Arbor, Mich.: 137 plants, mainly from Colorado (136881); 209 plants, chiefly from Michigan (137964).
- HERON, Mrs. L. A., Bethel, Alaska: (Through Dr. Aleš Hrdlička) Wood carving from burial on the Kuskokwim River, Alaska (137209).
- HERRE, Dr. A. W., Stanford University, Calif.: 1 sponge, 4 ascidians, 2 marine annelids, 75 shrimps, 20 crabs, 3 horseshoe crabs, 8 stomatopods, parasitic worm, and mollusks (136895). (See also under U. S. Department of Commerce, Bureau of Fisheries.)
- HESS, F. L., Washington, D. C.: Small collection of miscellaneous ores and minerals, containing mercury ores from Mexico and pegmatitic replacements from Black Hills, S. Dak. (136140); miscellaneous minerals from Mexico, Brazil, and other localities (136886); specimen of scheelite from Massachusetts Nevada Co. mine near Rochester, Nev. (137908). (See also under Irvin E. Behrman, George V. Bland, Kramat Pulai, Ltd., Earl Schultz, Fred E. Smith, and B. S. Wilson.)
- HEWITT, ERSKINE. (See under Sarah C. Hewitt.)
- HEWITT, SARAH C., New York City: (Through Erskine Hewitt) Silver portrait medal of Abram S. Hewitt by O. Roty (137071).
- HIBBARD, R. R., Buffalo, N. Y.: 40 slabs of Devonian black shale with conodonts from New York (135456); 30 slabs of Middlesex black shale with conodonts from 18-Mile Creek, Erie County, N. Y. (136499).
- HIDORE, JOHN, Rockford, Iowa: 9 specimens of a Devonian coral from Rockford (135848).
- HILDEBRAND, Dr. S. F. (See under U. S. Department of Commerce, Bureau of Fisheries.)
- HILL, Prof. W. C. O., Colombo, Ceylon: 2 lorises from Ceylon (135239, exchange).
- HILLIER'S SON CORPORATION, R., New York City: A specimen of Spanish saffron and a specimen of Paraguay



- tea for the materia media collection (136049).
- HILLYER, MRS. VIRGINIA W., Baltimore, Md.: Lighting collection of the late Virgil M. Hillyer (136485).
- HIMMELHEBER, DR. HANS, Karlsruhe, Germany: 4 examples of West African negro art (wood carvings) (137182).
- HINTON, G. B., Tacubaya, D. F., Mexico: 4 plants from Mexico (139432).
- HINTON, H. E., Cambridge, England: 14 beetle larvae representing 6 named species (139057).
- HIPPISLEY, MRS. MARIANNE E., Terrace, British Columbia: 150 Lepidoptera from British Columbia (137079).
- HISCOX, J. W. (See under California Pacific International Exposition.)
- HO, DR. T. L., Peiping, China: 1 specimen each of belyinite and oborite from Beiyin Obo, China (139157, exchange).
- HOBART, MRS. L. F., Milford, Ohio: (Through Mrs. C. D. Walcott) Chiffon gown worn by donor when president general of the National Society of the Daughters of the American Revolution (137150).
- HOBBS, H. H., Gainesville, Fla.: 85 amphipods, 1 isopod, 1 copepod, and 1 mollusk (138694).
- HOFFMAN, DR. W. A., San Juan, Puerto Rico: 21 miscellaneous insects from Puerto Rico (133289); 12 water beetles (136732).
- HOLL, DR. F. J., Buffalo, N. Y.: Type specimen of helminth (135329); 1 type specimen of parasitic worm (136625).
- HOLLISTON MILLS, INC., Philadelphia, Pa.: 4 packs of sample bindings (136917).
- HOLT, Prof. W. P., Bowling Green, Ohio: 9 mineral specimens from Ohio (134859), exchange).
- HOLTZCLAW, E., Clinchfield, Ga.: (Through Pennsylvania Dixie Cement Corporation) 1 lumbar vertebra of an extinct cetacean and rib fragments of a sirenian (134063, deposit).
- HONESS, DR. C. W., Tulsa, Okla.: 1 brachiopod from Arkansas novaculite (137185).
- HOOPER, F. C. (See under Barton Mines Corporation.)
- HOOPER HIGH SCHOOL, San Diego, Calif.: 300 plants, chiefly from California (137740, exchange).
- HORA, DR. S. L. (See Zoological Survey of India.)
- HORTON, F. W., San Francisco, Calif.: 1 specimen of kramerite and kernite from the Kramer deposit of the Pacific Coast Borax Co. (135124); 1 specimen each of colophonite from New York, wire gold from Oregon, placer gold and placer platinum from California, and scheelite from Nevada (135482, exchange); 5 specimens of clarkelite, 2 of quartz, and 3 of silver ore from various localities (137371, exchange). (See also under Sunshine Mining Co.)
- HORTON, H. L., Ocean View, Va.: 1 fish from Ocean View (136065).
- HOTCHKISS, NEIL. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)
- HOUGH, MRS. MYRTLE Z., Washington, D. C.: Collection of early American cabinetmakers' tools, lighting fixtures, and devices, Apache and California baskets, drawings and photographs, fragments of old glass and English pottery, and miscellaneous objects pertaining to the history of European and American handicrafts, collected by the late Dr. Walter Hough (136880); enameled glass Scythian bead and engraved jasper seal (136523, deposit).
- HOUGH, P. R. (See under H. J. Brodrick.)
- HOUGH, DR. WALTER, Washington, D. C.: 2 examples of early pencil pointing devices (135228).
- HOWE, E. A., New York City: 25-cent note of Lowell Bank, issued October 31, 1862 (135214).
- HOWELL, A. H., Washington, D. C.: Double ovaries of marsh hawk (139306). (See also under U. S. Department of Agriculture, Bureau of Biological Survey.)
- HRDLÍČKA, DR. ALEŠ, Washington, D. C.: Stone war club from a large midden deposit near Point Roberts, Wash. (136047); 2 shells from Kodiak Island, Alaska (136138); 1 opossum from Cleveland Park, D. C. (138201). (See also under Mrs. L. A. Heron, Carl Lomen, and Smithsonian Institution, National Museum.)
- HUBBS, DR. C. L., Ann Arbor, Mich.: 12 fishes (135319). (See also under University of Michigan, Museum of Zoology.)
- HUBLER, F. E. (See under Youngstown Arc Engraving Co.)
- HUBRICHT, LESLIE, St. Louis, Mo.: 140 marine invertebrates (136930, 137160).
- HUCKEY, EDGAR, Boom, Tenn.: 1 hair-worm (135931).
- HUDDLE, DR. J. W., Chapel Hill, N. C.: 65 Devonian brachiopods from New Albany shale of Indiana (136098).
- HUGHES, MRS. MARTHA A., Washington, D. C.: Sash, sword, and certificate of honorable service owned during the

- Civil War by Lt. William Allen, Indiana Volunteer Infantry (139429).
- HUGHES, Dr. R. C., Stillwater, Okla.: Slides of helminths (138730).
- HULETT, Mrs. RETHA R., Columbus, Ohio: Antique brass war shield obtained from an English physician who received it from one of his patients in Brunei, British North Borneo (136918).
- HULL, F. M., University, Miss.: 35 flies (26 species, 12 of which are new to the collection) (133357, exchange).
- HULTÉN, Dr. ERIC, Lund, Sweden: 402 plants from Alaska (136410, part exchange).
- HUMPHREY, R. R., Tucson, Ariz.: 20 plants (135684).
- HUNT, C. N., New York City: Original brass model of the sewing machine for which Walter Hunt, great-grandfather of donor, was granted U. S. Patent no. 11161, June 27, 1854 (139439).
- HUNT, Prof. G. R., Fairmont, W. Va.: 124 land and fresh-water shells from West Virginia (135910).
- HUNTER, Mrs. H. C., Rosslyn, Va.: Homespun linen damask towel owned in 1775 by M. B. Coleman, Newburyport, Mass. (137961).
- HUNTER, Mrs. T. L., King George, Va.: (Through H. S. Barber) 1 mollusk (135149).
- HYNES, M. A. Weimar, Tex.: 8 plants from Texas (133283).
- IDAHO, UNIVERSITY OF, Moscow, Idaho: 2 plants from Idaho (129618, 139630); 3 plants from Idaho (136430, exchange); 12 specimens of fossil wood from Tertiary of Idaho (137712).
- Agricultural Experiment Station, Sandpoint, Idaho: (Through J. H. Christ) 202 plants from Idaho (133112).*
- IKEDA, Dr. HAYATO, Fukuoka, Japan: 3 specimens of a sand-dollar (139800, exchange).
- ILLINOIS STATE NATURAL HISTORY SURVEY, Urbana, Ill.: (Through L. R. Tehon) 16 plants from Illinois (135155, exchange); (through Dr. D. H. Thompson) 6 paddlefishes from Illinois (136224).
- IMLER, R. H., Stockton, Kans.: 2 rough-legged hawks (135862, 136970).
- INGLES, Prof. L. G., Chico, Calif.: 10 types of helminths (135831, 136503).
- INSTITUTE OF PLANT PROTECTION, Leningrad, U. S. S. R.: (Through Miss M. Nikolskaja) 69 Hymenoptera (12 species) (135305, exchange).
- INSTITUTO BUTANTAN, São Paulo, Brazil: (Through Dr. Afranio do Amaral) 102 snakes from Brazil (136422).
- INSTITUTO DE BIOLOGIA VEGETAL, Rio de Janeiro, Brazil: 40 plants from Brazil (135894, exchange).
- INSURANCE CO. OF NORTH AMERICA, Philadelphia, Pa.: (Through C. A. Palmer) American fire relics, consisting of a collection of uniform equipment, buckets, fire marks, horns, models, hand pumper *Alert*, hose reel and prints (138182, loan).
- INTERIOR, U. S. DEPARTMENT OF THE: *Geological Survey: Collection of minerals, including chalcopyrite from Tennessee, arsenopyrite from Alabama, barite and magnetite from North Carolina, and calcite from Oklahoma (135470); about 60 samples of kyanite and vermiculite collected by L. M. Prindle from North Carolina and northern Georgia (135577); 336 invertebrate fossils from Pleistocene of Oahu, Hawaii (136061); several fossil corals and barnacles from southeastern Alaska (136096); 30 Cambrian fossils from Funeral Range, Death Valley Region, Calif. (136150); 1,000 fossils (100 species) from Miocene, Choctawhatchee formation of Florida (135305); collection of hadrosaurian and caratopsian dinosaur remains and skull of a small fossil crocodile from central Utah (136467); 187 plants collected in southwestern Alaska by J. B. Mertie, Jr. (136472); collection of types of Eocene and Miocene plants from Northwestern States, described by Dr. R. W. Brown (136711); 3 fossil cones from Eocene of North Dakota, described by Dr. R. W. Brown (136901); 25 mineral specimens and ores from Butte, Mont. (137481); 89 pelecypods from Cretaceous of Southern States, described by Dr. L. W. Stephenson (138704); 1 lot of described minerals from Amelia, Va., and various other localities (139317); type collection of rocks and ores from Magdalena Mining District, Socorro County, N. Mex. (139455).*
- National Park Service: 29 small mammals from Brewster County, Tex., collected by M. S. Johnson (137149); (through W. E. Branch) 438 plants from Platt National Park (135986); (through G. C. Ruhle and V. H. Cahalane) 4 dwarf whitefish from McDonald Creek, Glacier National Park, Mont., collected by C. L. Crogham (137721).*
- Reclamation Service: 51 photographs of Boulder Dam by Ben Glaha (135457, loan).*



- INTERNATIONAL PRINTING INK CORPORATION, New York City: 1 copy of magazine entitled "Color Sells" (135299).
- IOWA, STATE UNIVERSITY OF, *Department of Botany*, Iowa City, Iowa: (Through Prof. G. W. Martin) 24 plants from Panama (138212, exchange).
- JACKSON, BLANCHE E., and WILLIE MAE POST, Baton Rouge, La.: 108 shells, mostly marine, from Grand Lake, La. (130514).
- JACKSON, J. R., Columbia, Mo.: 1 cultivated fern (139695).
- JACKSON, R. W., Cambridge, Md.: 5 shells (topotypes) from Mexico (138722).
- JACKSON, T. L., Silver Spring, Md.: 1 wagon rough-lock—a wheel runner and lock to guide a wagonwheel on icy roads (137216).
- JACKSON, W. N., Montgomery, Ala.: Discoidal fragment of human skull, copper-stained, with cut edges, found about 1876 in an Indian mound in Sumter County, Fla. (131232).
- JACOT, A. P., Asheville, N.C.: 205 insects (132321).
- JAGELLONIAN UNIVERSITY, Krakow, Poland: (Through Dr. B. Pawtowski) 70 plants collected in Peru by Jelski (135158, exchange); 54 plants from Java (135461, exchange).
- JAMES, M. T., Fort Collins, Colo.: 22 leafhoppers (7 species), 6 of which are cotypes (139374, exchange).
- JAPANESE GOVERNMENT, *Imperial Japanese Navy*, Tokyo, Japan: (Through Yaito Ono) 100 bottom samples collected by Japanese surveying vessels (130068, exchange).
- JARDIN BOTANICO, Madrid, Spain: (Through Dr. José Cuatrecasas) 10 plants from South America (136395, exchange); 416 plants collected by Mutis (137366, exchange); 2 plants (139148, exchange).
- JARDIN BOTANIQUE DE L'ÉTAT, Brussels, Belgium: 67 plants from Colombia (139386, exchange).
- JERNIGAN, W. P. (See under L. H. Kimball.)
- JEWELL, MINNA E., Harvey, Ill.: 3 freshwater sponges from northern Wisconsin (135922).
- JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: Types of 6 species of Tertiary Coastal Plain Crustacea (109066, deposit); fragment of a Miocene whale skull (135711, deposit); 4 types and 2 other specimens of fossil turtles from Maryland and Virginia and type specimen of ground sloth femur from South America (138484, deposit); 2 plants from Brazil (139504, exchange); (through W. Gardner Lynn) type of fossil bird from the Miocene of Plumpoint, Md. (137011, deposit).
- JOHNSON, FRANK, New York City: 892 Lepidoptera, including a number of rare and new species and comprising 442 specimens from St. Catharina, Brazil, 225 from North Peru, 25 species already set, and 200 specimens of duplicates (135302); 276 insects from Paraná, Brazil (137724); 2,000 insects from southern Brazil, including many new species (139060).
- JOHNSON, G. B., Newport News, Va.: 3 ruffed grouse and 1 spruce grouse (136640).
- JOHNSTON, Dr. EARL S., Hyattsville, Md.: 1 horned lizard from Boulder City, Nev. (139690).
- JOHNSTON, Mrs. VIRGINIA A., Hyattsville, Md.: 1 ruby-throated hummingbird (135287).
- JOHNSTON, W. D., Jr. (See under H. B. Patterson.)
- JOLLY, H. G., Trion, Ga.: 1 small-mouth black bass, from Lookout Mountain, Ga. (135018).
- JONAS, COLOMAN. (See under Robert Rockwell.)
- JONES, E. R., Jr., Norfolk, Va.: 6 phyllopods (135895).
- JONES, J. C., Camp Roosevelt, Md.: 2 tarantulas from Camp Roosevelt (135227); 1 lot of bones of the loon (3 skeletons mixed together) and about 15 amphipods (136152); 2 birds (136262).
- JONES, Mrs. M. E., Fort Screven, Ga.: 1 compound ascidian (137922).
- JONES, N. F., Landover, Md.: Persian blue glass salt dish and Majolica ware molasses jug (137074).
- KANSAS STATE AGRICULTURAL COLLEGE, Manhattan, Kans.: (Through Dr. R. C. Smith) 2 flies (136044).
- KANSAS, UNIVERSITY OF, *Museum of Birds and Mammals*, Lawrence, Kans.: 4 bat skins with skulls from Barber County, Kans. (136961, exchange); (through Dr. C. D. Bunker) 4 turtles from Prairie County, Ark. (137108).
- KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- KECK, Dr. D. B. (See under Carnegie Institution of Washington.)
- KEIFER, H. H. (See under California Department of Agriculture.)
- KELLY, W. S., Hudson Hope, British Columbia: 6 flying squirrels from Laurier Pass, British Columbia (136657).
- KELLY, Dr. E. F. (See under American Pharmaceutical Association.)
- KELLY, Dr. H. A., Baltimore, Md.: 3 spiders (136445, 136648).

- KENT, A. M., Max Meadows, Va.: Ghost dance headdress from the White Mountain Apache Indians, Arizona (135297, loan).
- KERNODLE, G. H., Washington, D. C.: A Smith and Goodrich shelf clock with spring and fusee movement (135564, loan).
- KERR, Dr. J. A. (See under Brazil National Department of Public Health.)
- KILLIP, E. P. (See under Smithsonian Institution, National Museum.)
- KIMBALL, L. H., Azucar, Fla.: (Through W. P. Jernigan) Archeological shell specimens from a shell mound on property of U. S. Sugar Corporation, near Canal Point, Fla. (135686).
- KING, WILLIS, Great Smoky Mountains National Park, N. C.: 11 fishes (136204).
- KINGMAN MEMORIAL MUSEUM OF NATURAL HISTORY, Battle Creek, Mich.: 10 exhibition specimens of Hawaiian lavas (138608).
- KIRKLAND, FORREST, Dallas, Tex.: 5 sandstone slabs with fossil jellyfish from Cretaceous of Texas (136131, exchange).
- KLEEMANN GALLERIES. (See under R. S. Wright.)
- KLEINOSCHEG, Mrs. C. A., Elgin, Ill.: Richard K. Peck collection of weapons, articles of personal adornment, costumes, baskets, stone implements and clubs, decorated gourds, and other miscellaneous ethnological material from the Papuans and Negritos of Dutch New Guinea and from the Dyaks of Borneo (137754, deposit).
- KLUG, GUILLERMO, Iquitos, Peru: 235 plants from Peru (137951).
- KNIGHT, J. B., Princeton, N. J.: 7 Mississippian Ostracoda (7 species) from near St. Louis, Mo. (139822).
- KNIGHT, W. A., Biltmore, N. C.: 1 fern from North Carolina (135893).
- KNOBLOCH, I. W., Red House, N. Y.: 26 plants from United States and Mexico (135143).
- KNOWLTON, G. F. (See under Utah State Agricultural College.)
- KNOX, Mrs. McCook, Washington, D. C.: Half of a hand-woven double-weave, red-white-and-blue coverlet in 4-block figure and a bordered cotton applique quilt in leafcross pattern (138938, loan).
- KNUCKOLS, BERNARD, Amherst, Va.: 1 spider from Virginia (136716).
- KNOLL, J. N., Columbus, Ohio: 14 beetles (2 species, one represented by 6 paratypes) (136101). (See also under Ohio State University.)
- KOMP, W. H. W., Ancon, Canal Zone: 20 flies (137037).
- KRAMAT PULAI, LTD., Ipoh, Federated Malay States: (Through F. L. Hess) 1 specimen of scheelite from Malay States (137001).
- KRAUSHAAR GALLERIES, C. W. (See under Mahonri Young.)
- KRIEGER, H. W., Washington, D. C.: 1 red-eyed vireo (136290); linen handkerchief bordered with Chantilly lace (139816). (See also under Smithsonian Institution, National Museum.)
- KRIEGER, MARVIN, Jr., Muskogee, Okla.: Miniature Confederate flag (137471).
- KROMBEIN, K. V., Buffalo, N. Y.: 5 paratypes of wasps (138364, exchange).
- KRULL, Dr. W. H., Washington, D. C.: 2 moles from Beltsville, Md. (135307).
- KYANCUTTA MUSEUM, Kyancutta, South Australia (in cooperation with the Roebling fund): 1 large mass of the Henbury meteorite (135008, exchange); 1 individual of the Henbury meteorite series (137395, exchange).
- LABORATORY OF ANTHROPOLOGY, Santa Fe, N. Mex.: 1 tarso-metatarsus of Amazon parrot (136968).
- LADD, Dr. H. S., Washington, D. C.: 9 fossil crabs from Vitilevu, Fiji (136260).
- LAGEN, MARC, Seattle, Wash.: 1 whale fetus from Port Hobron, Alaska (135614).
- LAHMAN, Mrs. C. E., Tulsa, Okla.: 9 living and 1 herbarium specimen of cacti from Oklahoma (136106, 136276).
- LAMB, G. N., Chicago, Ill.: 2 specimens of mahogany from Key Largo (138222).
- LAMKIN, Dr. E. E., Vienna, Md.: 1 spider (135334).
- LANE, A. B., Centerville, Md.: Linen damask napkin of patriotic design, commemorating American independence, woven especially by I. W. Wicoulson Manufacturers, Lisburn, Ireland, for Samuel Chase, signer of the Declaration of Independence, and used by him in his home at Annapolis, Md. (137173).
- LANE, BOODLE, Galena, Kans.: 1 specimen of sphalerite and chalcopryite from Bendalari mine, Picher, Okla. (137035).
- LANE, MRS. PEARL M., St. Petersburg, Fla.: 1 shell from Tarpon Springs, Fla. (139322).
- LA POINTE, A. T., San Diego, Calif.: Archeological material and 2 skulls from Kanaga Island (Aleutians), Alaska (131274).
- LARIMER, C. S., Washington, D. C.: Collection of beaded and quilled ob-



- jects from Sioux Reservation, S. Dak., collected by Mrs. Edna O. Larimer (139569).
- LARNER, W. A., Jr., Shepherdstown, W. Va.: Ethnological material obtained from the Jivaro Indians of eastern Ecuador by donor (134930); (through M. W. Stirling) a chief's seat of carved wood from the Jivaro Indians and 2 South American blowguns from the Yagua or Kokama and Jivaro Indians (138199).
- LARSEN, NORMAN, Parco, Wyo.: A Cretaceous echinoid from Parco (136579).
- LAUSANNE, UNIVERSITÉ DE, Lausanne, Switzerland: (Through Prof. E. Wilczek) 180 plants from Europe (138486, exchange).
- LAW, J. EUGENE, Altadena, Calif.: 2 trunk skeletons of blackbirds (136956).
- LAWLER, F. R., Clovis, N. Mex.: 1 insect from Clovis (135674).
- LAWRENCE, Mrs. DAVID, Washington, D. C.: A modern 1-passenger jinrikisha (137365, loan).
- LAY, G. B., Raleigh, N. C.: 36 butterflies (136137).
- LEEPER, Mrs. HENRIETTA G., Candor, N. Y.: Medal of honor awarded to William Hart, machinist of the U. S. S. *Marblehead*, for gallantry and heroism while cutting cables under fire of the enemy at Cienfuegos, Cuba, May 11, 1898 (135928).
- LEIDEN MUSEUM, Leiden, Netherlands: 31 recent crinoids from the Willebrord Snellius Expedition to Dutch East Indies (132436).
- LELAND, R. S. (See under Mrs. Grace L. Richards.)
- LEMMER, FRED, Lakehurst, N. J.: 78 lepidopterous larvae (17 species) (136192).
- LEONARD, E. C., Washington, D. C.: 40 plants from Ohio (135884); 1 flying squirrel and 1 weasel from Bladensburg, Md. (135934); 39 plants from Ohio and West Virginia (136103); 77 plants from Virginia and Maryland (136313); 1 wood specimen of American smoketree (139879).
- LEONARD, JOHN, Urbana, Ohio: 1 wood specimen each of black willow, Osage-orange, and dotted hawthorn, collected by donor near Thackery, Champaign County, Ohio (138939).
- LEUSSLER, R. A., Omaha, Nebr.: 2 Lepidoptera, representing 2 species with paratype, both males (136887).
- LEVITT, RAYMOND, Westmoreland, Md.: 1 black-widow spider (135283).
- LIGHT, Dr. S. F., Berkeley, Calif.: 15 crabs (135572).
- LIMA, Dr. A. DA COSTA, Rio de Janeiro, Brazil: Small collection of scale insects (134918).
- LIMA, FRANCISCO DE QUEIROZ, Para, Brazil: (Through Wilfred Steven) 2 skins of Riker's woodhewer (139376).
- LINDBERGH, Col. CHARLES A. (See under Smithsonian Institution.)
- LINDQUIST, RUTH L., Duxbury, Mass.: 7 barnacles and 28 amphipods (138661).
- LINGNAN UNIVERSITY, Canton, China: 335 plants (chiefly of the Sixth Hainan Expedition) from China (137744, exchange).
- LINSLEY, E. G., Berkeley, Calif.: 4 beetles (4 species) (135689).
- LOCHMAN, Dr. CHRISTINA, South Hadley, Mass.: 16 type specimens of Upper Cambrian trilobites (138644).
- LOCKE, H. C., Samsonville, N. Y.: A model-T Ford touring car, 1913 (120103).
- LODGE, Mrs. GEORGE CABOT. (See under Mrs. C. L. McCawley.)
- LODING, Dr. H. P., Mobile, Ala.: 540 exotic Coleoptera (many named) (135229); 4 beetles (135666); 30 flies and 8 beetles (136656).
- LOMEN, CARL, Seattle, Wash.: (Through Dr. A. Hrdlička) Tip of a "jade" drill from Kobuk River, Alaska (137751).
- LONGLEY, Dr. W. H., Baltimore, Md.: 2 fishes (holotypes of 2 new species) collected south of Tortugas, Fla., by donor (136882); 9 fishes (138462); 1 fish (holotype) from Tortugas, Fla. (139048).
- LOOMIS, H. F., Coconut Grove, Fla.: 3 myriapods (type and paratypes of 3 species) (138152).
- LOOMIS, Mrs. MARTHA L., Boston, Mass.: Collection of jewelry, china plate, coins, and paintings (136181, bequest).
- LOWE, H. N., Long Beach, Calif.: 2 shells (1 a paratype) (134919).
- LOWE, J. L., Syracuse, N. Y.: 8 plants from New York (138646).
- LUMSDEN, DAVID. (See under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.)
- LUNDELL, C. L. (See under University of Michigan.)
- LUNZ, G. R., Jr., Charleston, S. C.: 1 echinoderm (136039); 12 crabs and 50 shrimps from South Carolina and Florida (136139); 25 shrimps, 3 crabs, and 37 amphipods (136900, 139358). (See also under Charleston Museum.)
- LYNN, Dr. W. G., Baltimore, Md.: 2 crabs (137903). (See also under Johns Hopkins University.)

- LYON, Dr. M. W., Jr., South Bend, Ind.: 1 mole head from Bluffton, Ind. (138638).
- LYONNET, E., Mixcoac, D. F., Mexico: 222 plants from Mexico (136407).
- MACCREARY, DONALD, Newark, Del.: 2 beetles (136295).
- MACFADDEN, Mrs. FAY A., Culver City, Calif.: 10 plants from British Columbia and Oregon (135941).
- MACGINITIE, G. E., Corona Del Mar, Calif.: 300 amphipods, 1 crab, 7 copepods, 1 isopod, 2 crayfishes, 57 amphipods, and 1 bottle of amphipods (135663, 135826, 135880, 139641).
- MACKIN, Prof. J. G., Ada, Okla.: 44 Crustacea, including paratypes of 2 new species of isopods and 2 new species of amphipods (all alcoholic) and paratypes of 1 new species of cladoceran (3 slides) (137144).
- MAKAROV, Dr. W. W. (See under Academy of Sciences, Zoological Institute, Leningrad, U. S. S. R.)
- MANNS, M. M., Newark, Del.: 300 homopterous insects from Liberia (139059).
- MARSHALL, B. C., Imboden, Ark.: 4 lots of parasitic worms (135082); 5 jars of ticks from Arkansas (135673); 5 termites from Arkansas (136690); 12 crystals of gypsum from near Cushman, Independence County, Ark. (137702).
- MARSHALL, E. B., Halifax, N. C.: 50 miscellaneous insects from North Carolina (136279); 3 gray-fox skulls, 4 mink skulls, and 1 muskrat skull, all from Halifax (137222); 4 horned larks and 1 sapsucker (137938); 18 small mammal skulls from Halifax (138247, 138337); 64 fishes, 1 frog, 3 mammals, and 23 shells (139044); 1 parasitic jaeger (139559).
- MARSHALL COLLEGE, Huntington W. Va.: (Through Prof. F. A. Gilbert) 100 plants from West Virginia (139476, exchange).
- MAESTEN, JOSEPH A., and FRANCIS R., Washington, D. C.: 1 Bausch and Lomb camera shutter and valve (136421).
- MARTIN, Mrs. FLOSSIE, Mocksville, N. C.: 4 shells from North Carolina (135028).
- MARTIN, G. L., Baltimore, Md.: Model, 1/25 size, of first airplane built and flown by donor, Santa Ana, Calif., 1909 (125541); a parachute and a pack of a form invented and constructed by donor in 1914 and patented December 28, 1915 (135800).
- MARTIN, Prof. G. W., Iowa City, Iowa: 52 plants from Colombia and Panama (136902, 137106). (See also under State University of Iowa.)
- MARTINEZ, J. P., Mexico City, D. F.: 1 specimen of diatomaceous earth from El Tizate, Jalisco (137091).
- MARTINEZ, Prof. MAXIMINO, Mexico City, D. F.: Small collection of ants (135466); 1 plant from Veracruz (138951).
- MARYE, W. B., Baltimore, Md.: 1 fossil burrow from Devonian of Pennsylvania (139687); projectile points, blades, and axes from Illinois and Maryland (139698).
- MASARYK UNIVERSITY, *Botanical Institute*, Brno, Czechoslovakia: 100 plants from Czechoslovakia (138752, exchange).
- MASON, C. R. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)
- MASTRO-VALERIO, ALEXANDRO, Ann Arbor, Mich.: 25 prints for special exhibition during May 1936 (139047). Loan.
- MAXON, Dr. W. R., Washington, D. C.: One exhibition specimen of echinoid from Miocene of Jones Wharf, Md. (135361); 10 plants from near Washington, D. C. (139808). (See also under Smithsonian Institution, National Museum.)
- MAXSON, A. C., Longmont, Colo.: 15 beetles from New Mexico (136468).
- MCCALL, HAROLD, Oklahoma City, Okla.: A 39 by 34 inch oil painting of the airplane *Winnie Mae*, depicting it over the ocean during Wiley Post's world flight in 1933 (136293).
- MCCALLUM, L., Washington, D. C.: Model,  $\frac{1}{16}$  size, of the Boeing F-4-B-4, a current type of U. S. Navy fighter airplane (139650, loan).
- MCCAWLEY, Mrs. C. L., Washington, D. C.: (Through Mrs. George Cabot Lodge) 2 fans in cases and a disjointed carved ivory box, all Chinese (139567).
- MCCLELLAND, W. H., Tuckahoe, N. Y.: 3 specimens of polished serpentine (139373).
- MCINTOSH, A. C., Rapid City, S. Dak.: 19 plants from Western United States (138190).
- MCINTOSH, Dr. ALLEN, Washington, D. C.: 125 land snails from near Pomonkey, Charles County, Md. (136668).
- McKENNA, ALICE I., Washington, D. C.: An all-white cotton-and-linen homespun counterpane, about 1798, woven by Mrs. Angus Alfred McDonald; a homespun, blue-and-white coverlet, about 1866, woven by Mrs. Duncan McInnis; and a wooden shuttle, used in weaving the coverlet, made by Duncan McInnis (139520, loan).



- MCKENZIE, Capt. C. O., Washington, D. C.: 33 plants from Tahiti (136906).
- MCKINNON, W. C., Washington, D. C.: An impeller for an airplane's generator (137962).
- MCLEAN, DUNCAN, Tin City, Alaska: (Through Dr. P. S. Smith) 1 specimen of cassiterite from Seward Peninsula, Alaska (136469).
- MCLEAN, Mrs. NORTH, Shrub Oak, N. Y.: 107 mollusks from Florida (133581).
- McMULLEN, MARY F., Washington, D. C.: (Through J. B. McMullen) 2 Bristol glass stands (135128).
- McVAUGH, Dr. ROGERS. (See under University of Georgia.)
- MEAD, Dr. ELWOOD, Washington, D. C.: (Through Mrs. Elwood Mead) the Elwood Mead collection of 22 ethnological specimens from aboriginal Australian tribes (138648).
- MEEHEAN, O. L., Washington, D. C.: 3 parasitic copepods (135668).
- MELEN, F. F., Sheffield, Ala.: Collection of Mississippian (Lower Chester) brachiopods from near Decatur, Ala. (137993).
- MENASCO MANUFACTURING Co., Los Angeles, Calif.: A Menasco "Pirate" aircraft engine, 4 cylinders, inverted, in-line and air-cooled, type B4, 95 horsepower, 1930 (136938).
- MERCK & Co., INC., Rahway, N. J.: Specimens of the alkaloids cinchonine, quinine, and quinidine for addition to the Cinchona exhibit (136110); 14 specimens of medicinal chemicals official in the Pharmacopoeia of the United States, Eleventh Decennial Revision (139700).
- MEXIA, Mrs. YNES, Berkeley, Calif.: (Through Mrs. H. P. Bracelin) 3 plants from Brazil (135083); 21 plants from Brazil (137045).
- MEYERS, E. C., Syracuse, N. Y.: Sioux Indian tomahawk of loaded buffalo horns recovered from Little Big Horn Battlefield (138882).
- MICHELSON, Dr. TRUMAN, Washington, D. C.: Pair of sealskin boots of Hudson Bay Eskimos (137076).
- MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 11 insects (134278).  
*Department of Botany*: 65 mosses from Mexico and Central America (135238, exchange); 7 plants from the Department of Peten, Guatemala (136323, exchange); 26 plants, mostly from Yucatan Peninsula (136473, exchange); 2,485 plants collected in northwestern India by Walter Koelz (136608, exchange); 893 plants collected by Rahmat in Sumatra (137950, exchange); 29 plants from Mexico and India (138370, exchange); (through C. L. Lundell) 401 plants from Mexico and Central America (135273, 137093).  
*Museum of Zoology*: 5 hawks (136483), exchange; (through Mrs. L. K. Gloyd) 83 dragonflies (34 species) 1 a paratype (135232); (through Prof. Calvin Goodrich) 306 land and fresh-water shells from the Peten-north Alta Vera Paz region of Guatemala collected by Henry van der Schalie (138503); (through Dr. C. L. Hubbs) 6 phyllopods (137224, exchange).
- MICKEL, Dr. C. E. (See under University of Minnesota.)
- MILLER, Dr. A. K., Iowa City, Iowa: 6 Upper Cambrian brachiopods (137381).
- MILLER, G. S., Jr., Washington, D. C.: 1 box turtle and 2 geckos from Big Pine Key, Fla., collected by H. B. Hinton (139563).
- MINISTERIO DE INDUSTRIAS, Bogota, Colombia: 370 plants from Colombia (136286, exchange); (through Dr. E. P. Arbelaez) 14 plants from Colombia (137089, exchange).
- MINNEAPOLIS PUBLIC LIBRARY, Minneapolis, Minn.: 1 Philippine thrush (138780, exchange).
- MINNESOTA, UNIVERSITY OF, St. Paul, Minn.: (Through Dr. C. E. Mickel) 2 flies (136040).  
*Department of Geology*, Minneapolis, Minn.: (Through Dr. C. R. Stauffer) 1 rare Ordovician edrioasteroid echinoderm from Minnesota (136607, exchange).
- MISER, H. D., Washington, D. C.: 1 exhibition slab of manganese-bearing Cason shale with girvanellas, from Arkansas (137357).
- MISSISSIPPI STATE GAME AND FISH COMMISSION, Jackson, Miss.: (Through Fannye A. Cook) 8 plants from Mississippi (136145, 136452).
- MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 105 plants collected in Ecuador by H. J. F. Schimpff (135117, exchange).
- MITMAN, C. W., Washington, D. C.: 1 combined direct and right-angled view finder (135306).
- MOISANT, MATILDE, Montrose, Calif.: The Rodman-Wanamaker Altitude Trophy for women pilots, which was awarded to donor in 1911 for reaching an altitude of 4,000 feet at the Nasau Boulevard Airdrome (136949).
- MOISANT, Mrs. VERMADILIA, Laurelton, Long Island, N. Y.: The original barograph sheet for the State of Liberty flight made by John B. Moisant, October 30, 1910, and a booklet contain-

- ing the formal resolution by the Aero Club of America expressing their admiration for this aviator and regret for his death, which occurred January 6, 1911 (137214).
- MONROE, HENRY, Washington, D. C.: (Through John Barrett) 1 great horned owl (136498).
- MONTANA, UNIVERSITY OF, Missoula, Mont.: (Through Dr. Charles Deiss) 2 Devonian invertebrate fossils (coral and stromatopore) from Montana (136617).
- MONTVILLE, A. H., Middletown, Ohio: Bone artifacts presumably from a Fort Ancient culture village site 4 miles from Middletown (135059).
- MOORE, BENSON B., Washington, D. C.: 1 print (etching and drypoint), "White Herons at Home" (139812).
- MOORE, MRS. MARY N., Savannah, Ga.: 3 rolling hoops and stick and a framed photograph from a stereopticon view of donor and two brothers, period of 1870 (138372).
- MOORE, O. G., Brownsboro, Ala.: 1 piece of an old yellow-poplar fence rail (135328).
- MOORE, DR. R. D. (See under Dr. C. E. Fleck and Dr. T. H. Spence.)
- MOOREHEAD, DR. W. K., Andover, Mass.: Collection of hematite axes, copper hatchets, stone pendants, drilled tablet, unfinished ceremonial object, stone pipe, flint spearheads, and clay vessels (137427).
- MORRIS, DR. R. T. (See under Clinton Prouty.)
- MORRISON, B. Y. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- MORRISON, MRS. DOROTHY B., Falls Church, Va.: 1 starfish (139323).
- MORRISON, DR. J. P. E., Washington, D. C.: 25 marine and fresh-water shells from Matapeake, Md. (135715); 10 swamp tree-frogs and 3 salamanders from Virginia (135871); 1,310 land and fresh-water mollusks collected in Virginia, West Virginia, and Maryland, and 73 insects, spiders, and myriapods and 7 salamanders (136455); 1 skull of red-tailed hawk (136736); 11,800 mollusks, 65 insects, 125 crustaceans, and 3 salamanders from Florida, North Carolina, and South Carolina (139870). (See also under Dr. Paul Bartsch, Jesse Williams, and Smithsonian Institution.)
- MORTENSON, E. W., Homesdale, Idaho: 1 sample of pyroxmangite from Homesdale (139310).
- MULAİK, STANLEY, Edinburg, Tex.: 1 snake (136898); an adult frog and tadpole from 10 miles northwest of Edinburg (139561).
- MUNDER, N. T. A., Baltimore, Md.: 1 printed "broadside" entitled "The Gettysburg Address by Abraham Lincoln" (138776).
- MUNILLA, MAJ. and MRS. FELIPE, Washington, D. C.: 2 botijas, or earthen jars, for holding olive oil, from the Santa Clara Convent, Habana, Cuba, built in 1644 (139232).
- MURBARGER, MRS. W. B., Costa Mesa, Calif.: 226 shells, 1 lizard, 5 shrimps, 5 marine annelids, and 4 insects (137485).
- MURRAY, REV. J. J., Lexington, Va.: 1 Ohio house wren (135839).
- MURRILL, DR. W. A., Gainesville, Fla.: 21 spiders (136863, 137943, 137771, 138359).
- MUSCALUS, J. A., Upper Darby, Pa.: Check of the Bank of the United States dated May 14, 1796 (137515).
- MUSÉE PHYSIOGRAPHIQUE, Krakow, Poland: 150 plants from Poland (135286, exchange).
- MUSEO ARGENTINO DE CIENCIAS NATURALES, Buenos Aires, Argentina: (through Alberto Carcelles) 2 amphipods (137027, exchange).
- MUSEO NACIONAL DE PANAMA, Panama, Panama: 9 mollusks, 1 group of barnacles (dry), and 1 snake from Panama (119039).
- MUSEUM OF NEW MEXICO, Santa Fe, N. Mex.: 1 fragmentary tibiotarsus of sharp-tailed grouse (137078).
- MUSGRAVE, P. N., Fairmont, W. Va., 17 beetles (135675): 5 beetles from Antigua and 1 beetle from Brazil (137737).
- MUTZIGGER, JOHN, Cabin John, Md.: 7 spiders (5 species) (136314).
- MYERS, EUNICE, Washington, D. C.: 1 lady's silk parasol with folding handle molded from artificial tortoise shell (139876).
- MYERS, DR. G. S., Washington, D. C.: 1 cichlid fish from Barrigon, Rio Meta, Colombia (135698); 8 dried fishes collected in Amazon River by Carl Griem (135935); 1 fish from the Amazon (136194); 5 aquarium fishes (136200); 1 characin fish said to be from Dutch Guiana (136277); 12 fishes from a spring in Fish Lake Valley, Nev. (138635); 2 fishes (139154); (with Almon Arnold) 43 fishes, 3 shrimps, 9 tadpoles, and 3 crawfishes from Zekiah Swamp, Charles County, Md. (135173). (See also under Smithsonian Institution, National Museum.)
- NATIONAL ANILINE & CHEMICAL CO., INC., New York City: 1 specimen each of acriflavine and acriflavine hydrochloride (139823).



- NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: 7 pieces of fabric from the balloon *Explorer II*, which on November 11, 1935, ascended to an altitude of 72,395 feet, a world record for all types of manned aircraft (139168); a sun compass designed by Albert H. Bumstead and used by Admiral R. E. Byrd in his Antarctic flights (137424); (through Dr. C. G. Abbot) envelope carried in the stratosphere balloon *Explorer II* on its unsuccessful flight of July 12, 1935, and also on its successful flight of November 11, 1935, when the height of 72,395 feet was reached, the highest altitude ever attained by man (136952.)
- NATIONAL SAFETY COUNCIL, Chicago, Ill.: 2 strip films entitled "Safe Housekeeping Practices" and "Safe Electrical Equipment in the Home", for the public health exhibits (139651.)
- NATIONAL WUHAN UNIVERSITY, Wu-chang, Hupeh, China: (Through Dr. H. H. Chung) 10 plants from China (139296, exchange.)
- NAT LEWIS PURSES, Inc., New York City: Zebrawood purse illustrating an interesting use of Flexwood (136270.)
- NATURAL HISTORY MUSEUM, San Diego, Calif.: 60 plants from southern California (139671, 139806.)
- NATURHISTORISCHES MUSEUM, Vienna, Austria: 7 flies (5 species) (135363, exchange.)
- NATURHISTORISKA RIKSMUSEET, Stockholm, Sweden: 30 grasses from Hispaniola (135113, exchange); 36 mosses from Brazil (135118, exchange); 201 plants from South America (138590, exchange); 559 plants (137096, exchange); 252 mosses and hepatics (137995).
- NAVY, U. S. DEPARTMENT OF THE, Bureau of Aeronautics, Washington, D. C.: A 2-bladed wooden propeller from the U. S. Naval airship *Akron*, 1934 (136686); a 3-bladed adjustable metal propeller and a swivel reduction gear from the U. S. Naval airship *Macon* (137952).
- NEILD, E. F., Shreveport, La.: 4 fragments of pottery from Hickory Hill, Natchitoches, La. (137462).
- NELSON, ELIAS, Yakima, Wash.: 11 plants from Washington (136437).
- NESSEL, H., Giessen, Germany: 6 fragmentary ferns from South America (139526, exchange); 1 plant from Colombia (139803, exchange).
- NEWCOMER, Mrs. H. C., Washington, D. C.: Moro and Bagobo weapons collected by Maj. Arthur B. Foster, late captain in the 19th U. S. Infantry and major, Philippine Scouts (139568).
- NEW HAVEN CLOCK CO., New Haven, Conn.: (Through P. H. English) 10 modern clocks to replace a part of earlier accessions of clocks from the same donor (139696).
- NEW SOUTH WALES, GOVERNMENT OF, Sydney, New South Wales:  
*Department of Agriculture*: (Through N. S. Noble) 70 gall-making wasps, representing at least 10 species (unnamed), all reared (138647).  
*Geological Survey*: (Through Dr. F. W. Booker) 13 specimens of a rare Silurian brachiopod from Australia (123672, exchange).
- NEW YORK AQUARIUM, New York City: (Through C. M. Breder, Jr.) 14 labyrinth fishes, including holotype of a new species (130600).
- NEW YORK BOTANICAL GARDEN, New York City: Photograph of a plant from China (135195); 14 photographs of ferns and fern illustrations (135357); 1,613 plants collected by Dr. A. C. Smith in Fiji (135552, 138715); 1,515 plants, chiefly from Hainan (135563); 109 plants, chiefly from Borneo (135710); 4 photographs of ferns (136215); 119 plants from China (136218); 2 ferns from Tennessee (136294); 186 photographs of type specimens of plants (136488); 144 plants, chiefly from New Zealand (136990); 1 plant from Cuba (138593). All exchange.
- NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 104 wood samples and 125 mounted herbarium specimens of trees of United States (139819, exchange).
- NEW YORK STATE CONSERVATION DEPARTMENT, Albany, N. Y.: (Through J. R. Greeley) 15 lampreys from the Allegheny drainage and 2 ciscoes from Chautauqua Lake, N. Y., near Bemus Point (134464).
- NEW YORK STATE MUSEUM, Albany, N. Y.: 1 exhibition specimen of Devonian starfish from Saugerties, N. Y. (136274, exchange); 69 plants from New York (136996, exchange).
- NICÉFORO-MARIA, Rev. Brother, Bogota, Colombia: 120 fresh-water fishes from Colombia (135578, 137382); 14 characid fishes from Guaicaramo, Rio Meta Basin, Colombia (136411).
- NICOLAY, A. S., Montclair, N. J.: 44 beetles, 24 of which represent 6 named species (137748, exchange); 415 beetles, 19 of which are types (138463, exchange).
- NIKOLSKAJA, Miss M. (See under Institute of Plant Protection.)

- NININGER, H. H., Denver, Colo. (in co-operation with Roebling Fund): Specimen of Albin, Wyo., meteorite (136440, exchange).
- NOBLE, Dr. A. E., Stockton, Calif.: 4 trematodes (135843).
- NOBLE, N. S. (See under Government of New South Wales, Department of Agriculture).
- NOLAN, Mrs. M. O., Washington, D. C.: 1 bat (136042). (See also under U. S. Department of Treasury, Public Health Service.)
- NORDSTROM, Prof. F., Stockholm, Sweden: 2 Lepidoptera (136392, exchange).
- NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. Dak.: 1 insect and 1 lot of parasitic worms (136631).
- NORTH TEXAS STATE TEACHERS' COLLEGE, Denton, Tex.: (Through H. L. Graham) 57 plants from Texas (136892).
- NOYES, MARY and KATHERINE, Takoma Park, Md.: An all-white quilted counterpane made about 1850 by Katherine Haswell Noyes, a "rose" wool blanket woven about 1830 by Lydia Plimpton, and a blue-and-white plaid wool blanket woven about 1825 by Sarah Keller Noyes (135168).
- NYLANDER, O. O., Caribou, Maine: 30 Ordovician graptolites from Aroostock County, Maine (137029).
- OBERHOLSER, Dr. H. C. (See under Baldwin Bird Research Laboratory.)
- OHIO STATE UNIVERSITY, Columbus, Ohio: (Through J. N. Knull) 21 Hemiptera (13 species) (136045).
- OKLAHOMA, UNIVERSITY OF, Norman, Okla.: (Through Delzie Demaree) 131 plants from Oklahoma (139427, 139669).
- OLDROYD, Mrs. IDA S., Stanford University, Calif.: 2 pycnogonids (135821); 135 Pleistocene crabs (22 species) from California (135873).
- OLIVER, L. L., Washington, D. C.: 3 fishes from Jackson River at Georgetown, Fla. (138335).
- OLIVER, MARION L., Baltimore, Md.: Collection of clubs, spears, boomerang, and ornamental objects from Oceania, Australia, and Persia (136507).
- OLIVER, OPIE, Rock Point, Md.: 52 fishes from Neal Sound, Cobb Island, Md., and a lot of fossils from various nearby localities, principally Horse Head Cliffs, Va. (139043).
- OLMSTED, J. B., Alexandria, Va.: A small airplane impeller of the Olmsted pattern, a wind tunnel model of a twin pusher outrigger monoplane, designed by C. M. Olmsted, 1912, and 3 photographs of a similar full-scale machine during construction (135174, loan).
- OLSSON, A. A., Gloversville, N. Y.: 9 fossil crabs from Panama (136205).
- O'NEILL, Rev. Father HUGH. (See under Catholic University of America.)
- ONO, YAITO. (See under Japanese Government.)
- ORSINGER, W. H., Washington, D. C.: 2 beetles (138500).
- UGHTON, J. (See under Royal Ontario Museum of Zoology.)
- OXFORD UNIVERSITY, *Imperial Forestry Institute*, Oxford, England: 160 African plants (138744, 139081; exchange); (through Dr. J. B. Davy) 205 plants from India and Africa (138513, 139481, exchange).
- PAGE, J. R., Jr., Aberdeen, N. C.: 1 pinesnake from Aberdeen (139688).
- PAINE, R. G., Washington, D. C.: A snake collected by F. F. Shipley in Winchester, Va., and 2 spadefoot toads from Summerville, S. C., collected by P. R. Paine (139560).
- PALEONTOLOGISK MUSEUM, Oslo, Norway: 14 Downtonian fossil fishes from Spitsbergen (101929, collected for the Museum); 14 Ordovician-Silurian corals (11 species) from Estonia and Norway (137010, exchange).
- PALERMO, ANTONY, Washington, D. C.: 2 small earthenware bottles from near Tunis, Tunisia (137904).
- PALMER, C. A. (See under Insurance Co. of North America.)
- PALMER, M. HELEN, Washington, D. C.: 107 views of Washington, D. C., and United States and 9 souvenir albums (137760).
- PAN AMERICAN UNION, Washington, D. C.: 10 beetles (135923).
- PARK, J. T., Berkeley, Calif.: 39 fishes from coast of California (133787).
- PARKE, DAVIS & Co., Detroit, Mich.: 22 photographs illustrating steps in manufacture of medicine (137363).
- PARKER, Prof. G. H., Cambridge, Mass.: 7 amphipods (133606).
- PARKER, Mrs. MARY S. (See under Estate of Maj. Gen. George O. Squier.)
- PARKER, Prof. R. L., Zurich, Switzerland: 1 specimen of the new mineral hydroxylapatite from Switzerland (139077, exchange).
- PARKER, Dr. R. R. (See under U. S. Department of the Treasury, Public Health Service.)
- PARKER, W. E., Kensington, Md.: Stone collar, stone celt, and potsherds from a cave near village of La Paguera, southwestern Puerto Rico (137130).
- PARSONS, E. C., Hollywood, Calif.: Miniature American flag carried over the German lines April 4, 1917, by Sgt. Pilot Edwin C. Parsons, of Escadrille N 124, French Army (136559).



- PATCH, E. L., Co., Boston, Mass.: Model consisting of 5 scenes illustrating manufacture and use of cod-liver oil and a case in which to exhibit it (137100).
- PATRICK, Dr. LEON, Orange, Calif.: 1 pileated parakeet (137145); 2 Bourke's grass parakeets (137907, 138926).
- PATTERSON, H. B., Hines, Ala. (Through W. D. Johnston, Jr.) 1 blindfish from a well on the Patterson farm near Hines, Lauderdale County, Ala. (137081).
- PAUL, Rev. Brother, Panama, Panama: 57 plants from Panama (134236).
- PAWTOWSKI, Dr. B., Krakow, Poland: 30 plants from Europe (135157, exchange). (See also under Jagellonian University.)
- PAYNE, Mrs. ALICE G., La Jolla, Calif.: Sample from an infant's dress made of a patriotic cotton print purchased at Paris, Ill., and worn by Dr. Joe Rickey Payne at time of Civil War (136391).
- PEABODY, EMILY H. (See under Mrs. H. R. Griffin.)
- PEARSE, Dr. A. S., Apalachicola, Fla.: 12 marine shells from Florida (137756). (See also under U. S. Department of Commerce, Bureau of Fisheries.)
- PEARSON, Dr. J. F. W., Coral Gables, Fla.: 38 crustaceans (130425).
- PEELES, R. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- PEEK & VELSOR, Inc., New York City: 3 botanical drugs—American saffron, Chinese rhubarb root, and poke berries (135939).
- PELLENBARG, A. V., Washington, D. C.: Model,  $\frac{1}{16}$  size, of the Laird super-resolution airplane in which James Doolittle established a transcontinental record of  $11\frac{1}{4}$  hours, September 4, 1931 (136102, loan).
- PELLOUX, Dr. ALBERTO, Genoa, Italy: 17 mineral specimens (135069, 135948, exchange).
- PELTON, P. P., Southern Pines, N. C.: "Tiger's Claws", an eviscerating weapon, India (136920).
- PENNSYLVANIA DIXIE CEMENT CORPORATION. (See under E. Holtzclaw.)
- PENNSYLVANIA, UNIVERSITY OF, Philadelphia, Pa.: 142 plants from Eastern United States (139558, exchange).
- Morris Arboretum*: 23 specimens of plants from New Jersey and Delaware (137095, exchange); 447 plants (137955, exchange).
- University Museum*: Skeletal material obtained by First Joint Soviet American Expedition in Crimea in 1933 (136037, exchange).
- PENROD, JURDEN & CLARK Co., Cincinnati, Ohio: 1 small sample of Maidou burl veneer from Indo-China (136516).
- PÉREZ, Prof. CHARLES, Paris, France: About 100 mollusks and 3 helminths from Roscoff (Bretagne), France (134367).
- PERKINS, S. E., 3d, Indianapolis, Ind.: 6 turtles from Posey County, Ind. (139387, 139533).
- PERRY, E. L. (See under Williams College.)
- PETELOT, Prof. A., Hanoi, Tonkin: 192 plants from Tonkin (138511).
- PHILIP, Dr. C. B. (See under U. S. Department of the Treasury, Public Health Service.)
- PHILIPPINE ISLANDS, GOVERNMENT OF, *Bureau of Health*, Manila: (Through F. E. Baisas) 25 mosquitoes, of which 22 are cotypes representing 14 new species and subspecies by F. E. Baisas, all from the Philippines (137394).
- PHILLIPS, Dr. E. P., Pretoria, Union of South Africa: 39 colored illustrations of South African flowering plants (139082).
- PHILLIPS, Mrs. VENIA T., Ithaca, N. Y.: 21 slide mounts of trypetid flies, representing species new to collection (139437, exchange).
- PICCINELLI, Dr. PIERO, Bergamo, Italy: 1 specimen of natrolite from Italy (130706, exchange).
- PICKEL, Prof. D. B., Pernambuco, Brazil: 22 plants from Brazil (135876, 137110).
- PICKENS, Prof. A. L., Greenville, S. C.: 18 salamanders, 6 frogs, 1 turtle, 1 snake, and 2 mammals (135063).
- PIEL, WALTER, St. Petersburg, Fla.: 1 barnacle living on gorgonian (139166); 20 shells from Florida (139493).
- PIERCE, Dr. W. D., Philadelphia, Pa.: 10 lace bugs from Philippine Islands (138341).
- PIGGOT, Dr. C. S., Washington, D. C.: Half of a core sample about 8 feet long taken from bottom of Atlantic Ocean, lat.  $39^{\circ}13' N.$ , long.  $72^{\circ} W.$ , at 1,200 fathoms (136480).
- PILLSBURY, Mrs. G. B., Washington, D. C.: Venetian point lace left by will to Mrs. Sumner Bugbee over 50 years ago (137453).
- PIZZINI, ANDREW, Washington, D. C.: 126 isopods, 450 amphipods, 5 crayfishes, 4 worms, 1 shrimp, 2 copepods, and 2 salamanders (137075, 138368, 139160).
- PLASKON Co., Inc., Toledo, Ohio: Case for a cautery-light transformer

- molded in ivory "Plaskon" by the Comprex Oscillatory Corporation, New York City (138196).
- PLAUMANN, FRITZ, Nova Teutonia, Brazil: 94 Lepidoptera from unexplored primeval forest of Uruguay River (137928).
- PLEITNER, Mrs. J. T., Washington, D. C.: Edison phonograph cabinet of wax cylinder records and Swiss music box (136519).
- PLUMMER, Dr. C. C., Mexico, D. F.: Copper hatchet or celt presumably from the ruins of Mitla, Oaxaca (136486).
- PLUMMER, Mrs. HELEN J., Austin, Tex.: Topotypes of a new foraminifer from Cretaceous of Texas (137752).
- POHL, BRUNO, São Paulo, Brazil: 132 Lepidoptera (132 species) (135938).
- POHL, Dr. E. R., Mammoth Cave, Ky.: One specimen of allophane from west boundary of Mammoth Cave National Park (135170).
- POMONA COLLEGE, *Department of Botany*, Claremont, Calif.: (Through Dr. F. V. Coville) 2 plants from California (137956, exchange).
- PONTIUS, L. L., Circleville, Ohio: 9 plants from Ohio (135706, 137948).
- POPENOE, W. P. (See under California Institute of Technology.)
- POPKINS, G. R., Washington, D. C.: Envelope mailed and postmarked March 4, 1933, and bearing the signatures of President Franklin D. Roosevelt and Vice President John N. Garner (137028).
- POPOV, V. B., Leningrad, U. S. S. R.: 49 bees (30 species) (135834, exchange).
- PORSILD, Dr. MARTIN, Copenhagen, Denmark: (Through Capt. R. A. Bartlett) 2 specimens of native iron from Disco Island, Greenland (136875).
- Post, Mrs. WILEY, Ponca City, Okla.: The airplane *Winnie Mae*, without supercharger and flying instruments but otherwise as last flown by Wiley Post, together with extra tail group, original world-flight wing and spar section, Sperry robot pilot, drift instruments, oxygen generators, oxygen instruments, and Post's stratosphere suit (115561, loan).
- POST OFFICE DEPARTMENT, U. S.: 14 sets of specimen stamps, etc. (1,733 specimens) received by Post Office Department from International Bureau of Universal Postal Union, Berne, Switzerland (135208, 135678, 136069, 136264, 136637, 137113, 137416, 138192, 138471, 138663, 138955, 139164, 139636); 3 specimens each of the 3-cent California Pacific International Exposition stamp, 3-cent Boulder Dam, 3-cent Michigan Centennial, 3-cent Texas Centennial, 3-cent Rhode Island Tercentenary, 25-cent Trans-Pacific Air Mail, and 16-cent Special Delivery Air Mail (bicolor), issue of 1936 (138474, 138613, 139531).
- POTTER, S. L., Alexandria, Va.: Collection of data illustrating some types of kites developed for use in meteorological observations by U. S. Weather Bureau during 1895-96 (139495).
- POTTS, F. A., Ensanada, Puerto Rico: 1 nighthawk (135550).
- POULSON, Dr. CHRISTIAN, Copenhagen, Denmark: 3 specimens and 11 casts of trilobites from East Greenland (139435).
- POULSON, D. H., Pikeville, Tenn.: Collection of gastropods from Canadian rocks of Sequatchie Valley, Tenn. (136283).
- POWELL, ELLA M., Washington, D. C.: All-white, reversible, quilted counterpane, or "stuffed work" quilt, made in 1850 at Atlanta, Ga., by Mrs. Fielding Travis Powell, mother of donor (136919).
- PRICE, Dr. E. W., Washington, D. C.: 1 snake, 1 frog from Mayaguez, Puerto Rico, collected by Atherton Lee (139825). (See also under U. S. Department of Agriculture, Bureau of Animal Industry.)
- PRICE, H. S. (See under Tom Berryman.)
- PRICE, J. W., Lancaster, Pa.: Small collection of insects, 18 flatworms, 1 leech, 43 crayfishes, 1 fish, 925 amphipods, 117 isopods, 25 copepods, 25 discodrilid worms, and 200 ostracods (136936, 137383, 137484, 138349, 138659, 138947, 139359); collection of Ordovician and Devonian invertebrate fossils from near Swatara Gap, Pa. (138204, 139473); 2 crayfishes, 15 amphipods, 10 isopods from Pennsylvania and 25 amphipods from Washington, D. C. (138602).
- PRICE, W. E., Baltimore, Md.: 6 specimens of chromite from Cecil County, Md. (137965, exchange).
- PRINTZ, HAROLD, Roseburg, Oreg.: 36 specimens of fossil wood and seeds from Oregon (137164).
- PROUTY, CLINTON, Stamford, Conn.: (Through Dr. R. T. Morris) 1 muskrat from Stamford (137031).
- PURPUS, Dr. C. A., Veracruz, Mexico: 147 plants, mostly ferns, from Mexico (136704).
- QUEENEY, J. J., Washington, D. C.: 2 snakes and a ruby-throated hummingbird from Forestville, Md. (135321, 135887, 139385).



- QUIRSFELD, E. D., Hillsdale, N. J. (Through W. S. Fisher) 13 beetles from Peru (137370).
- RADCLIFFE, Dr. LEWIS. (See under American Sponge & Chamois Co.)
- RAILWAY AND LOCOMOTIVE HISTORICAL SOCIETY, New York Chapter, New York City: Framed photograph of a miniature portrait of Horatio Allen (1802-1889) made by D'Aubigny in Paris in 1835 (136986).
- RALPH, T. M. (See under Remington Rand, Inc.)
- RANKIN, J. S., Jr., Durham, N. C.: 7 new species of helminths (138769).
- RAPPLEYE, R., Washington, D. C.: 12 plants from District of Columbia and Virginia (137470).
- RAWLINSON, ELIZABETH S., Staunton, Va.: 25 plants from Virginia (135293).
- RAYMOND, LOUIS, Punta Gorda, Fla.: 1 dog bone and 6 deer bones from an Indian mound on Peace River in De Soto County, Fla. (136727).
- READING, THE MARCHIONESS OF, Washington, D. C.: Picture frame in velvet with decorative design in worked gold and pearls, an example of Hindu goldsmith's art, originally presented to the late Lord Reading when Viceroy of India (139801).
- RECORD, Prof. S. J. (See under Yale University.)
- RED RIVER LUMBER Co., Westwood, Calif.: 15 square feet of 1 by 4 inch vertical-grain Douglas-fir flooring (137464).
- REDWOOD, Mrs. F. T., Baltimore, Md.: Collection of jewelry and old silver (138933).
- REED, Prof. C. T., Kingsville, Tex.: 3 bryozoans, 1 alcyonarian, 7 anemones, 2 sponges, 5 marine annelids, 3 echinoderms (137899).
- REED, E. L., Lubbock, Tex.: 4 plants from Texas (135303).
- REED, Dr. E. P., Valparaiso, Chile: 168 insects from Chile (138328, 139295).
- REED, Prof. ERNEST. (See under Syracuse University.)
- REESE, Prof. A. M., Morgantown, W. Va.: 1 hermit crab (136694).
- REID, E. D., Washington, D. C.: 28 fishes (139153).
- REID, ELEANOR, Silver Spring, Md.: 2 fishes from Cobb Island, Potomac River, Md. (135712).
- REINHARD, E. G., Clarks Summit, Pa.: 3 flies (2 species) (134928).
- REMINGTON RAND, Inc., Washington, D. C.: 5 old models of Sholes-Glidden and Remington typewriters (136288); (through T. M. Ralph) Model no. 1 of the noiseless typewriter (138594).
- REPETEK SAND DESERT STATION, Middle Asia Railway, U. S. S. R.: 66 plants from Karak-Kum Desert, Turkestan (135690, exchange).
- RESSER, Dr. C. E. (See under Smithsonian Institution, National Museum.)
- RHODE ISLAND STATE DEPARTMENT OF AGRICULTURE, *State Insectary*, Peacedale, R. I.: 15 miscellaneous insects (134905, 135339, 137718); (through G. A. Thompson, Jr.) 4 miscellaneous insects from Rhode Island (134238).
- RICE, A. P., Merida, Yucatan: 6 views of various temple ruins at the Maya cities of Chichen Itza and Uxmal, Yucatan (138779).
- RICE INSTITUTE, Houston, Tex.: (Through Prof. A. C. Chandler) 1 dipterous larva from stomach of a fish collected in Bermuda (135890).
- RICHARDS, Dr. A. G., Rochester, N. Y.: 1 lepidopteron from Hope, Ark. (134507, exchange); 2 Lepidoptera (135616).
- RICHARDS, Mrs. G. L., Newton, Mass.: (Through R. S. Leland) Collection containing jewelry, beaded bag, old spectacle frames, small magnifying glass, 2 paintings, and 1 chromolithograph (136893).
- RICHARDS, Dr. H. G., Philadelphia, Pa.: 1 mollusk from Arizona (136734); 2 fossil crab claws (137116).
- RICHARDS, R. B., London, England: 4 bees (135554, exchange).
- RICKER, Mrs. R. C., Tampa, Fla.: 1 cultivated fern from Florida (139549).
- RIJKSHERBARIUM, Leiden, Netherlands: About 415 plants from the Netherlands (139052, exchange).
- RITCHIE, Mrs. ELLA, Washington, D. C.: An Arab merchant's bracelet from Mecca (139874).
- RIVERO, Dr. L. H., Ann Arbor, Mich.: 2 fishes (135323).
- ROBA, RENE-PAUL, La Esperanza, Colombia: 1 slide and 1 vial of insects (137195).
- ROBERTS, Mrs. MARY R., and Mrs. ANNE J. B. DePUE, Chevy Chase, Md.: A sailmaker's fid and a book "The Art of Sailmaking", by Ware Branson, Jr., and I. R. Butts, Boston, 1860 (136662).
- ROBERTSON, P. R., College Park, Md.: Model,  $\frac{1}{16}$  size, of a Douglas O-38-B airplane, a current type of observation plane used by the U. S. Army Air Corps (138210); model,  $\frac{1}{46}$  size, of the Packard-LePere biplane, an American designed airplane of the World War period, which established a world altitude mark of 34,509 feet in 1921 (139440).
- ROBINSON, T. R., Orlando, Fla.: 1 cultivated fern (137414).

- ROCKWELL, ROBERT, Denver, Colo.: (Through Coloman Jonas) 1 pintail duck (136707).
- ROE, A. V., & Co., Ltd., Manchester, England: Data on the Avro 504-K airplane, developed by donors for flight training during World War (139915).
- ROEBLING FUND, Smithsonian Institution: Collection of calcites from Benderlari mine, near Picher, Okla., and sphalerites from Firecracker mine, near Joplin, Mo., collected by E. P. Henderson (135066); 1 turquoise specimen from Lucky Blue Turquoise mine, Cortez, Nev. (135119); 3 gum-mite specimens from Spruce Pine, N. C. (135277); 1 slice of the Morland meteorite (135836); 1 2,500-gram specimen of a meteorite from Hugoton, Kans. (136057); 3 specimens of prehnite from New Jersey (136396); collection of rare European and African exhibition minerals from Darabacek collection at Vienna (30 specimens) (136415); collection of specimens of native iron in basalt from Ovifak, Greenland (136910); end piece of Oberlin, Kans., meteorite (137092); 1 rough 217-carat ruby in matrix from Burma (138194); enargite specimens from Butte, Mont. (138249); group of stibnite crystals from White Caps, Manhattan, Nev. (138345); 1 specimen of austinite from Gold Hill, Utah (138653); 260-gram slice of the Seneca, Kans., meteorite and 147.5-gram slice of Clarendon, Wyo., meteorite (138742); 1 slice of Pleasanton, Kans., stony meteorite (139443); 1 specimen of the Holyoke, Phillips County, Colo., meteorite (139693). (See also under A. R. Allen, Kyancutta Museum, and H. H. Nininger.)
- ROGERS, H. M., Toronto, Ontario: 38 amphipods (138707).
- ROHRER, JOSEPHINE A., Washington, D. C.: Mortar pestle of carved wood, Zulu (137954).
- ROLLER, JANE, Washington, D. C.: 1 mollusk from Silver Spring, Md. (135455).
- ROLLINS, R. C., Pullman, Wash.: 12 plants (138650).
- ROOSEVELT, President FRANKLIN D., Washington, D. C.: Model, 1/48 size, of the steamship *Mauretania*, 1907-1935, which had been presented to him by the Cunard Steamship Co., Ltd. (134437); an accurate scale model, 1 inch to the foot, of a Hainan seagoing junk with specifications, print, photographs, and framed letters of presentation and acceptance (136424, loan); a collection of ethnological specimens from the San Blas (Tule) Indians of southeastern Panama (137405); 1 sailfish (137582); 1 greater amberjack caught by the presidential fishing party at Caicos Island, Bahamas (138746).
- ROOSEVELT, Mrs. FRANKLIN D., Washington, D. C.: A cloth doll dressed in Japanese costume presented to her by Tsuyoko Nakamura (136576, loan).
- ROYAL ONTARIO MUSEUM, Toronto, Ontario:  
*Museum of Mineralogy*: 1 lot of 22 Canadian minerals and ores (136-957, exchange).  
*Museum of Zoology*: (Through J. Oughton) 22 shells and 2 marine annelids from Prince Edward Island (137374); 1 song sparrow (139430).
- ROYAL PALM NURSERIES, Oneco, Fla.: (Through J. A. Combs) 1 plant (138743).
- ROYAL TYPEWRITER Co., Inc., Washington, D. C.: 1 old and 1 new typewriter, a skeletonized machine, and an enlarged type bar action model, illustrating features in the development of the Royal typewriter (136502).
- RUBZOV, J., Leningrad, U. S. S. R.: 11 flies (8 species of Simuliidae) (133-418, exchange).
- RUDOLPH, ALFRED, La Jolla, Calif.: 3 drypoints and etchings and 1 lithograph (135284).
- RUHLE, G. C. (See under U. S. Department of the Interior, National Park Service.)
- RUNYON, ROBERT, Tamaulipas, Mexico: 9 plants from Texas (139645).
- RUSBY, Dr. H. H., Newark, N. J.: 10 specimens of Russian ergot (135169).
- RUSSELL, PAUL. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- RUTGERS UNIVERSITY, New Brunswick, N. J.: (Through Prof. M. A. Chrysler) 100 plants from the Gaspé Peninsula (138151, exchange).
- SACRAMENTO JUNIOR COLLEGE, Sacramento, Calif.: Skeletal material from various sites in the Sacramento Valley (136214, 137918).
- ST. JOHN, Dr. E. P., Floral City, Fla.: 6 ferns from Florida (138153, 139319; exchange).
- ST. JOHN, R. P., Bluff Point, N. Y.: 8 ferns from Florida (135153); 5 plants from Florida (137896, 138964; exchange); 3 plants from Texas (138676, exchange).
- SAN MARTIN MUSEUM OF BUENOS AIRES, Buenos Aires, Argentina: (Through the Argentine Embassy) Bronze plaque commemorating establishment of San Martin Museum of Buenos Aires in 1927 (136492).
- SARGENT, F. H., Washington, D. C.: 168 plants (135145, 138652).



- SARGENT, R. H., Washington, D. C.: 2 Tlingit decorated baskets collected in 1908 by donor (138641).
- SATTES, P. R. R. M., Washington, D. C.: 1 iron-ore concretion from Kanawah County, W. Va. (138946).
- SAUNDERS, W. H., Alexandria, Va.: 1 pair of gold-plated convex eyeglasses made about 1850 and a tin spectacle case made about 1860 (138772).
- SAXMAN, G. M., Dallas, Tex.: 1 fern from Uvalde County, Tex. (136915).
- SAXTON, R. N., Washington, D. C.: 1 sharp-shinned hawk (136454).
- SAYLES, Dr ROBERT, Chestnut Hill, Mass.: 12 exhibition and study specimens of Permian varved clays from Squantum, Mass. (139821).
- SCARAMUZZA, Dr. L. C., Santiago de las Vegas, Cuba: 6 beetles (135872).
- SCHARRINGER, ANNA, Washington, D. C.: 3-valved oyster (138497).
- SCELLENBERG, Dr. A., Berlin, Germany: 75 amphipods (136601, exchange).
- SCHERER, W. G., Iquitos, Peru: Fishes, 6 crustaceans, 2 reptiles, and 1 amphibian, all collected in 1934 and 1935 in the Rio Ampiyacu and the vicinity of Pevas (Pebas) and Iquitos, Peruvian Amazon (136848).
- SCHLESCH, Dr. HANS, Copenhagen, Denmark: About 100 mollusks (135298); 165 mollusks from Estonia and Sweden (136199); 26 shells from Lithuania (139468).
- SCHMID, E. S., Washington, D. C.: 1 grass parakeet (135850); 1 Brazilian cardinal (136289); 1 troupial (136311); 1 weaverbird (136404); 2 zebra finches (136735); 1 white canary (136878); 2 African lovebirds (136997); 1 African lovebird and 1 zebra finch (136998); 1 Japanese titmouse and 1 Zebra finch (138499); 1 Japanese titmouse (139303); 1 monkey (139652).
- SCHMITT, Dr. W. L. (See under Smithsonian Institution, National Museum.)
- SCHROEDER, Dr. C. R. (See under Zoological Society of San Diego.)
- SCHUH, Dr. R. E., Washington, D. C.: 13 plants (139187).
- SCHULTZ, EARL, Tinton, S. Dak.: (Through F. L. Hess) 1 specimen of cassiterite from Tinton (136667).
- SCHWARDT, Dr. H. H., Fayetteville, Ark.: 43 flies (135885, 136043).
- SCOFFIELD, JOHN, Washington, D. C.: 42 salamanders and 3 lizards from Bradford County, Va. (136322).
- SCOTT, WINFIELD, Washington, D. C.: Model,  $\frac{1}{8}$  size, of the Curtiss airplane Y-A-8 *Shrike*, a military attack type in current use by the U. S. Army Air Corps (139653, loan).
- SCRIVEN, Brig. Gen. G. P., Washington, D. C.: Archeological material from Costa Rica, collected in October 1891 by General Scriven, and ethnological material from Central America and Arizona (139547).
- SCRUTON, Mrs. CHARLOTTE P., Glen Ridge, N. J.: (Through Mrs. Gertrude B. Davis) A 15-block pieced cotton quilt of the Civil War bearing conundrums, quotations, etc., 3,675 words in all, penned on the blocks, and two soldiers' letters referring to it, completed September 1, 1863, by donor's mother, Susan G. C. Pullen of Augusta, Maine, and 14 of her Sunday School pupils for the entertainment of soldiers from Maine in Union hospitals (138338).
- SCULLEN, Prof. H. A., Corvallis, Oreg.: 1 insect (135132, exchange).
- SCULLY, Dr. F. J., Hot Springs, Ark.: 68 plants from Western United States (137894).
- SEDGWICK MUSEUM, Cambridge, England: (Through Dr. Ian Cox) Paleozoic coral and thin sections from Arctic America (138209).
- SEIBERT, R. J., St. Louis, Mo.: 155 plants from Panama (136698).
- SENCKENBERGISCHE NATURFORSCHENDE GESELLSCHAFT, Frankfort-am-Main, Germany: (Through Dr. F. Haas) 21 shells (paratypes) from Philippine Islands (139080, exchange).
- SEYMOUR, RALPH FLETCHER, Chicago, Ill.: 52 etchings for special exhibition during October 1935 (136099, loan).
- SHANNON, Mrs. CAROLINE F., Washington, D. C.: (Through T. J. Shannon) A nickel medalet commemorating the exhibit of the International Nickel Co. at the Louisiana Purchase Exposition, St. Louis, Mo., 1904 (136428).
- SHANNON, Mrs. CAROLINE W. (See under Mrs. Eleanor W. Bisell.)
- SHANNON, T. J. (See under Mrs. Caroline F. Shannon and Mrs. Eleanor W. Bisell.)
- SHAPOVALOV, LEO, Stanford University, Calif.: 1 hybrid sturgeon from the Volga River in glass-topped exhibition jar (136394).
- SHARP, A. J. (See under University of Tennessee.)
- SHERMAN, C. D., Essex, England: Old English pitchpipe, formerly used in the Church of St. Mary's, Dedham, England (135980).
- SHERMAN, H. B. (See under University of Florida.)
- SHIDELER, Dr. W. H., Oxford, Ohio: 14 types and figured specimens of Ordovician cystids (135355).

- SHILLINGSBURG, GEORGE, Greenwich, N. J.: 2 builders' half models of New Jersey oyster schooners representing a type of about 1904 (*Anna M. Frome*) and the modern type (*Nordic*), 1926 (139149).
- SHIPMAN, F., Collington, Md.: 1 wicker umbrella holder from a sporting carriage (136955).
- SHIPPEN, Dr. L. P., Washington, D. C.: Original copper-plate portrait of Judge Joseph Hopper Nicholson (1770-1817) by Charles Balthazer Julien Fevret de St. Memin (1770-1852) (136988, loan).
- SHORT BROS., LTD., Rochester, England: Model,  $\frac{1}{16}$  size, of the Short 2-engine biplane, 1911, believed to be the first multi-engined airplane (134142).
- SHRADER, J. J. S., Freeland, Pa.: 1 specimen of halotrichite from Mammoth Vein, Jeddo no. 4 Colliery, near Freeland, Pa. (137186).
- SHULTS, ERNEST, Bartlesville, Okla.: A propeller blade and a set of pistons and bearings for the engine of the airplane *Winnie Mae*, associated with the forced landing of this plane at Muroc Lake, Calif., February 22, 1935 (137207).
- SINGER SEWING MACHINE Co., New York City: 5 chromium-plated "fashion aid" attachments for Singer sewing machine, 12 specimens of needlework done with the "fashion aid" attachments and 7 specimens of needlework done with the regular attachments (139875).
- SKUTCH, Dr. A. F., San Isidro del General, Costa Rica: 472 plants from Costa Rica (138409).
- SLAVIK, F., Prague, Czechoslovakia: 1 specimen of aglaurite from Teplice, Czechoslovakia (135288).
- SMALL, ALBERT, Washington, D. C.: Tin canteen of the period of the Civil War (135131).
- SMALL, Dr. J. K., New York City: Habitat photograph of a fern (139469).
- SMALL, R. P., Riverside, Calif.: An exhibition log of fossil wood from the Little Palo Verde Range, Calif. (138749).
- SMALLWOOD, Mrs. P., Falls Church, Va.: 1 Kentucky warbler (139240).
- SMITH, C. S., San Marcos, Tex.: 2 cave spiders from Ezell's Cave, Tex. (139487).
- SMITH, F. E., Spruce Pine, N. C.: (Through F. L. Hess) 1 specimen of ilmenite and 1 of uraninite from Spruce Pine (139079).
- SMITH, Dr. H. M., Washington, D. C.: 1 pair of jaws of the butterfly ray from Woods Hole, Mass. (136312); reproduction of the mural painting "Trionfo Di Venere" from the Casa Dei Vettii of ancient Pompeii, 5 small painting of Japanese subjects on silk cloth, collected in Japan in 1903, and 2 larger paintings of Japanese subjects on silk cloth (139478).
- SMITH, J. A., Washington, D. C.: 1 spider (136191).
- SMITH, Mrs. J. T., Fort Wayne, Ind.: Embroidered banner presented to the noted pioneer aviator, Arthur Smith, in recognition of his spectacular flights in Japan, 1916, and a selection of photographs and other data illustrating the career of this flier, who was active in aeronautics from 1910 until his death in 1926 (136198).
- SMITH, M. R., Mayaguez, Puerto Rico: 3 mollusks from Mayaguez (135906).
- SMITH, Dr. OSCAR, Killdeer, N. Dak.: Indian skull without lower jaw showing unusual dental anomalies (130541).
- SMITH, Dr. P. S. (See under Duncan McLean.)
- SMITH, Dr. R. C. (See under Kansas State Agricultural College.)
- SMITH, Mrs. R. K., Chicago, Ill.: 149 plants from Korea (134430, 135838).
- SMITH, W. R., Brodnax, Va.: 1 black-widow spider (135025).
- SMITHSONIAN INSTITUTION, Washington, D. C.: (Through Col. Charles A. Lindbergh) The original wheels of the *Spirit of St. Louis*, which were removed at Minneapolis, August 1927, during the Guggenheim Fund National Air Tour and replaced with those now exhibited with the airplane (135883, deposit); 1 etching, "Teeming Ingots", by James E. Allen (136605, deposit); 52 Mexican photographs obtained by Neil M. Judd in Mexico (137133, deposit); 15 pottery heads and 1 rude obsidian arrowpoint purchased from a native woman at the ruins of Teotihuacan, 28 miles northeast of Mexico City (139477, deposit); the airplane *Winnie Mae* purchased for the United States by Act of Congress approved June 22, 1936, together with extra tail group, original world flight wing and spar section, Sperry robot pilot, drift instruments, stratosphere suit, oxygen generators and oxygen instruments, complete as last flown by Wiley Post but without supercharger and flying instruments (140083, deposit).
- Bureau of American Ethnology: Archeological material collected by M. W. Stirling from a village site formerly occupied by the Waccamaw Indians near Myrtle Beach, S. C. (135291); 2 earthen-



ware bowls from the Dragoon Mountains, southeastern Arizona (138344); the Mrs. Charles D. Walcott collection of Navaho sand paintings and 4 paintings of miscellaneous subjects (138501); 10 photographs of Australian natives, 20 lithographs of Congo Negro subjects from an old French atlas, and 33 slides of subjects from Palestine, Tunis, Syria, Asia Minor, Greece, China, and Malaysia (139472).

*National Museum, collected by members of the staff:* Bartsch, Dr. Paul, and Dr. J. P. E. Morrison: (With W. H. Ball) Collection of zoological specimens, including mammals, birds, reptiles, amphibians, fishes, about 4,000 mollusks, corals, marine invertebrates, and insects, collected on the islands adjacent to Cape Charles Peninsula, Va. (135197); (with W. L. Brown, C. R. Aschemeier, and C. S. East) 64 amphibians from near Washington, D. C., collected for use in enlarging the District collection (139548). Cooper, Dr. G. A.: 150 Cambrian and Ordovician invertebrate fossils from Hudson Valley, N. Y., and the vicinity of York, Pa. (139694); about 50 Devonian fossils from Elks Park, Port Jervis, N. Y. (139802); (with Preston E. Cloud and Dr. A. S. Warthin) about 100,000 Devonian invertebrate fossils from southern Indiana and Illinois, southwestern Ontario, and Iowa, Michigan, and New York (135847). Gilmore, C. W.: About 200 fossil reptiles and mammals collected by the 1935 paleontological expedition from the Two Medicine formation in Montana and the Wasatch formation, Big Horn Basin in Wyoming (136203). Hrdlička, Dr. Aleš: Collection of skeletal material, archeological objects, bird, reptile, and animal bones from a prehistoric site on Kodiak Island (134107). Killip, E. P.: 38 plants collected by Mr. Killip in Europe (136426); 844 plants from Florida (138710). Krieger, H. W.: Collections of ethnological and archeological objects, human skeletal material, and mollusks from various sites along the Columbia River near Bonneville, Oreg., and North Bonneville, Wash. (135869). Maxon, Dr. W. R.: 10 plants from Maryland (135667); 29 plants from Virginia (136269); 270 plants from Florida (137412). Myers, Dr. G. S.: 3 salamanders from

Two Lick Hills, Indiana County, Pa. (139873); (with Stuart Abraham) 606 fishes from Dismal Swamp and various other localities in Virginia (139049). Resser, Dr. C. E.: about 6,500 Cambrian invertebrate fossils from the southern Appalachians (137183). Schmitt, Dr. W. L.: 16 fishes from Tortugas, Fla. (139810).

*National Museum, obtained by purchase:* 222 skeletons of birds from Cameroun, West Africa, and 2 skins (113433); 11 birds (127674); 319 fishes from the Malay Peninsula, South Africa, and South America (132212); collection of iridescent obsidian from Oregon (133831); 3 black-bear skulls from Hannah Bay, Ontario (135252); 6 birds (135279); 35 butterflies (14 species), all from North America, except two from Panama (135356); United States postage stamps issued 1922-34 (160 specimens) (135360); 330 photographs of type specimens of plants in European herbaria (135459); 1 phytosaur skull from Petrified Forest, Ariz. (135460); 365 beetles from the Charles Shaeffer collection, including 1 holotype and paratypes of 19 species (135469); 29 Devonian invertebrate fossils from Ontario and 1 piece of silicified wood from Kettle Point, Ontario (135818); 161 plants (mostly ferns) from British North Borneo (135878); 1 carnivore skull from the Tertiary of Nebraska (135891); 29 reptiles and amphibians from St. Thomas and Puerto Rico and 1 isopod from St. Thomas (136201); earthenware effigy whistle discovered on surface in Elizabeth City County, near Hampton, Va. (136233); 51 insects from Guerrero, Mexico (136416); 25 North American mosses (136479); 2 Devonian fossils from Bundenbach, Germany (136481); 15 specimens of Devonian silicified wood from Kettle Point, Ontario (136704); 9 turtles (136898); 300 plants collected in Brazil by Mrs. Ynes Mexía (137044); 16 bird skeletons from Chile (137131); 2 dance masks and 1 dance shield of the Hopi Indians, Arizona (137210); 4 birds (137362); 1 pterodactyl skull (137971); blue and gold lustre pitcher, German, period of about 1750 (138171); 852 beetles (204 species) of which 64 are paratypes and 13 types (138465); 4 etchings by Eric Scott, "Vine Arbour", "Brussels", "Primitive Farm", and

- "Calvi, Corsica" (138514); 207 plants from Albania and Greece (139084); 21 bird skeletons from Chile (138948); 1 complete fossil mammal skeleton from the Lower Oligocene of Argentina (139192); 8 bird skins (139230); 4 birds (139236); 12 crinoids from the Pennsylvanian rocks of Oklahoma (139503); 5 bird skeletons from Korea (139656).
- National Museum, made in Museum laboratories:* 2 casts of an earthenware figurine representing a female infant strapped to a board, excavated near Nashville, Tenn. (134850); 3 casts of a stone war club from a large midden deposit near Point Roberts, Wash. (135951); 2 casts of a carved limestone figure discovered by the Florida Archaeological Survey in August 1935, in Glenn B. mound, about 2 miles west of Wacissa, Jefferson County, Fla. (136202); 5 casts of a Folsom point found in the Lindenmeier site near Fort Collins, Colo. (136406); 3 casts of an earthenware effigy whistle from Elizabeth City County, Va. (136456); 3 casts of a Folsomlike projectile point presumably from Llano, Tex. (136992); casts of chipped mace and carved Catlinite pipe, originals, from Temple Mound, near Spiro, Okla., loaned by J. G. Braecklein, the owner (137937); 3 casts each of an earthenware vessel and a steatite pipe, originals from village site on Marlboro Point, Stafford County, Va., owned by Judge William J. Graham (139631); a group of 42 aeronautic insignia separately painted on masonite plaques, 24 inches square, by 4 Federal Art Project artists working under the direction of the section of aeronautics (139909).
- National Zoological Park:* 78 mammals (135309, 136641, 137219, 138592, 139181, 139692); 145 birds and 6 eggs (135918, 136450, 137000, 137367, 138467, 139484); 1 electric eel (139156); 24 reptiles and amphibians from the Zoo collection (139691).
- SNODGRASS, R. E., Washington, D. C.: 1 musk-turtle from 10 miles north of Solomons Island, Md. (135882).
- SNYDER, J. R. D., Battle Creek, Mich.: 1 shell (139172).
- SNYDER, L. H., Baltimore, Md.: 7 birds from Korea (135133). (See also under Songdo Higher Common School.)
- SOCIÉTÉ HISPANO-SUIZA. (See under Ateliers d'Aviation Louis Bréguet.)
- SOCIETY OF MOTION PICTURE ENGINEERS, New York City: 1 Edison spool-bank projection Kinetoscope, no. 429, 1897, and 12 other specimens relating to early motion-picture history (139045, loan).
- SOFIA, UNIVERSITY OF, Sofia, Bulgaria: 157 plants from Bulgaria and Greece (135114, exchange).
- SONGDO HIGHER COMMON SCHOOL, South Songdo, Korea: (Through L. H. Snyder) 1,737 insects (1,587 Lepidoptera and 150 beetles) (134664, collected for the Museum).
- SOUTH AFRICAN MUSEUM, Capetown, South Africa: (Through Dr. K. H. Barnard) 4 marine invertebrates, including the type (135240).
- SOUTHERN RHODESIA GEOLOGICAL SURVEY, Salisbury, Southern Rhodesia: Fragments of the Mangwendi meteorite from Southern Rhodesia (138711).
- SOUTHWELL, Dr. C. A., Bedford, Va.: 3 postal cards containing fine hand writing: (1) 3,003 words; (2) 4,759 words, and (3) 12,191 words; also a page from the June 1919 Ladies' Home Journal describing these cards by the donor (138268).
- SPAULDING, Col. T. M., Washington, D. C.: Full-dress uniform coat and dress uniform coat and trousers of the Coast Artillery Corps, U. S. Army (138504).
- SPEIDEN, JEANNETTE, Silver Spring, Md.: 16 Upper Paleozoic corals from Mount Assiniboine, Alberta (136477).
- SPENCE, G. C., Brooklands, Cheshire, England: 2 shells from Cuba (139654, exchange).
- SPENCE, Dr. T. H., Westport, N. Y.: (Through Dr. R. D. Moore) A fulcrum invented about 1905 by Dr. A. T. Still and used for adjusting ribs (136642).
- SPENCER, C., Guayaquil, Ecuador: 16 specimens representing medicine, magic dart, and fish poisons of the Indians of the Arajuno River district, Ecuador (129818, deposit).
- SPENCER LENS Co., Buffalo, N. Y.: 2 strip films entitled "Balanced Diet" and "Care of the Child", for use in automatic delineascope to supplement public health exhibits (139483).
- SPERISEN, F. J., San Francisco, Calif.: 8 polished jasper and 6 cabachon jasper specimens from San Francisco (136960).
- SPONGE & CHAMOIS INSTITUTE, Washington, D. C.: 9 specimens showing pastel-dyed Florida sheepswool sponges and household brushes made from sponges (137213).
- SPRINGER, STEWART. (See under Bass Biological Laboratory.)



- SPRINGER FUND**, Smithsonian Institution: Collection of fossil crinoids from Dewey limestone of Oklahoma (135276); 20 Coal Measures crinoids from Oklahoma (135488); 17 echinoderms from Devonian of Ontario (135819); a Devonian crinoid from Ontario (136703).
- SQUIER**, Maj. Gen. **GEORGE O.**, Estate of, Washington, D. C.: (Through Mrs. Mary Squier Parker) Collection of Philippine weapons and armor and a French artillery sidearm (135138); a gold watch presented to Maj. Gen. George O. Squier, U. S. Army, 1899-1918, in recognition of his military and scientific achievements (137445).
- STABLER**, **ELIZABETH T.**, Sandy Spring, Md.: 1 Wheeler & Wilson sewing machine, serial no. 91043 (135820).
- STACH**, **L. W.**, Melbourne, Victoria: 12 bryozoans from Victoria (135152).
- STAINBROOK**, **Dr. M. A.**, Lubbock, Tex.: 36 Devonian invertebrate fossils from Midriver, Johnson County, Iowa (136259); 3 rare brachiopods (*Martinia*) from Washington (Otis) formation of Iowa (136675).
- STANFORD UNIVERSITY**, Stanford University, Calif.: 20 ferns from Sonora (137449, exchange).
- Dudley Herbarium*: 77 plants from Mexico and Arizona (138937, exchange).
- STANLEY**, Capt. and Mrs. **E. D.**, Washington, D. C.: Collection of Peruvian, Chinese, and Filipino textiles (136883).
- STATE AGRICULTURAL COLLEGE**, Logan, Utah: 5 insects, including 1 paratype (135183).
- STAUFFER**, **Dr. C. R.** (See under University of Minnesota.)
- STEHLE**, **Dr. H.**, Pointe-a-Pitre, Guadeloupe: 717 plants from Guadeloupe and neighboring dependencies (135164, 136060, 136474, 137020, 137940, 138760, 139537).
- STEJNEGER**, **Dr. LEONHARD**, Washington, D. C.: 3 specimens of paper currency of Germany and Kamchatka Soviet Republic, issued 1920, 1922, and 1923 (135289).
- STENZEL**, **Dr. H. B.**, Austin, Tex.: 1 fossil crab from Cretaceous near Denison, Tex. (138737). (See also under University of Texas.)
- STEPHENSON**, **Dr. K.** (See under Universitetets Zoologiskemuseum.)
- STERNBERG**, **G. F.**, Hays, Kans.: Series of articulated vertebrae of a lizard from Oligocene near Douglas, Wyo. (136141); 1 skull and lower jaws of a fossil lizard from Oligocene of Wyoming and a tail and hind limb of a fossil mammal (137910, exchange).
- STEVEN**, **WILFRED**. (See under Francisco de Queiroz Lima.)
- STEVENS**, **A. M.**, Buenos Aires, Argentina: An audio-frequency transformer used by Dr. DeForest, an early grid condenser, and an audion tube of about 1913-14 (138952).
- STEVENS**, **Dr. BELLE A.**, Seattle, Wash.: 3 shrimps (135215).
- STEVENS**, **HENRY**, Washington, D. C.: 1 diaphoto exposure meter (137454, loan); 1 photographic thermometer (138635).
- STEVENSON**, **J. A.** (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- STEWART**, **LUTHER**, Phoenix, Ariz.: 2 specimens of hyalite with chalcedony from near Bagdad, Ariz. (137705).
- STEWART**, **Mrs. ANNA P.**, Washington, D. C.: Silk quilt top pieced in a variegated hexagon block pattern: "Grandmother's Flower Garden", by Eliza Jane Todd, Madison, Ind., 1835, grandaunt of donor (138944).
- STEWART**, **J. T., Jr.**, Portsmouth, Va.: 7 mollusks (135911, 136417).
- STILES**, **C. E.** (See under Mrs. Louise O. Stiles.)
- STILES**, **Dr. C. W.** (See under C. T. Bickford.)
- STILES**, **Mrs. LOUISE O.**, Washington, D. C.: (Through C. E. Stiles) Handwrought silver ring made in Russia about 1780, from the collection of Nicholas II, Alexander Palace, Tsarskoye Selo (136387).
- STIRLING**, **M. W.** (See under W. A. Larnier, Jr.)
- STOSE**, **GEORGE**. (See under G. L. Wiles.)
- STREATOR**, **Mrs. EMMA F.**, Washington, D. C.: A blue, green, red-and-white coverlet woven in Manheim, Lancaster County, Pa., between 1820 and 1830 by Mrs. Schaefer, great-grandmother of lender (138502, loan).
- STRICKLER**, **M. W.**, Staunton, Va.: 1 black-bear skull from Cold Springs, Va. (139527).
- STUDHALTER**, **Prof. R. A.**, Lubbock, Tex.: 29 plants from New Mexico (137895).
- SUNSHINE MINING Co.**, Mullan, Idaho: (Through F. W. Horton) 1 exhibition specimen of silver ore from Sunshine mine, Mullan (136520).
- SUTTON**, **Dr. G. M.**, Ithaca, N. Y.: 1 Carolina chicakadee (139649).
- SWALLEN**, **J. R.** (See under U. S. Department of Agriculture, Bureau of Plant Industry.)
- SWANTON**, **Dr. J. R.**, Washington, D. C.: 1 fossil palm from Natchitoches, La. (135130).
- SWETT**, **RUTH D.**, Winter Park, Fla.: 25 etchings (138940, loan).

- SWEZEY, O. H. (See under Hawaiian Sugar Planters' Association.)
- SYRACUSE UNIVERSITY, *Department of Botany*, Syracuse, N. Y.: (Through Prof. E. L. Reed) 423 plants from Venezuela (136571, 137132; exchange).
- TACK, P. I., Ithaca, N. Y.; 2 crayfishes (135338).
- TALBERT, Mrs. ALBERT, Bennings, D. C.: 1 young domestic chicken with 4 legs and 4 wings (139238).
- TALLANT, R. L., Los Angeles, Calif.: 65 Pliocene brachiopods from California (138264, exchange).
- TANG, Dr. CHUNG-CHANG, Foochow, China: About 350 shells of a new species, including the type, from China (139377).
- TARBOX, F. G., Jr., Brookgreen, S. C.: 14 plants from South Carolina (137082).
- TARTU UNIVERSITY, *Botanical Museum*, Tartu, Estonia: 50 plants from Estonia (136669, exchange).
- TAYLOR, Estate of Mrs. MARY ALICE: (Through Charles N. Fitts, Brookline, Mass.) 152 drawings by William Ladd Taylor (1854-1926) contained in 1 portfolio and 4 sketchbooks (136504).
- TAYLOR, Dr. T. M. C. (See under University of Toronto.)
- TEE-VAN, JOHN, St. Georges West, Bermuda: 10 stomatopod larvae (135034).
- TEHON, L. R. (See under Illinois State Natural History Survey.)
- TELEPHONE CAMERA CLUB, Washington, D. C.: 60 pictorial prints for exhibition during March 1936 (138333, loan).
- TEMPLE, GRACE L., Washington, D. C.: 1 hand-woven overshot coverlet, "Sun, Moon, and Stars", and 15 pieces of textile fabrics and examples of needlework, dating from the last quarter of 18th century to second quarter of 19th, also 2 cardcases illustrating use of mother-of-pearl and tortoise-shell (139053).
- TEN EYCK, J. A., Syracuse, N. Y.: Racing shell in which Edward Hanlan Ten Eyck won the "Diamond Sculls" at the Henley (England) Royal Regatta in 1897 (134203).
- TENNESSEE, UNIVERSITY OF, Knoxville, Tenn.: (Through A. J. Sharp) 2 ferns from Tennessee (137435, 139051; exchange).
- TEXAS, UNIVERSITY OF, Austin, Tex.: (Through Dr. H. B. Stenzel) 1 specimen and 4 casts of early Tertiary crabs from Louisiana and Texas (135487).  
*Department of Botany*: 14 ferns from Mexico (138617).
- THAANUM, Dr. D., Honolulu, Hawaii: 16 shells from Hawaii (136733).
- THARP, Prof. B. C., Austin, Tex.: 2 ferns from Texas (136916).
- THERIOT, L., Fontaine-la-Mallet par Montivilliers, France: 13 mosses (including 9 type fragments) from Chile (136660, exchange).
- THOMPSON, ESTATE OF Dr. CHARLES A.: (Through Ella M. Thompson) Cane and knife case owned by Charles Thomson, Secretary of the Continental Congress, 1774-1789, and a letter written by him, July 5, 1783 (138122).
- THOMPSON, Dr. D. H. (See under Illinois State Natural History Survey.)
- THOMPSON, ELLA M. (See under Estate of Dr. Charles A. Thompson.)
- THOMPSON, G. A., Jr. (See under Rhode Island Department of Agriculture.)
- THOMPSON, Mrs. HARRIET VAUX B. (See under Mrs. William Vaux Ewers.)
- THOMPSON, J. W., Seattle, Wash.: 772 plants from Northwestern United States (137203, 137408; exchange).
- TIDESTROM, IVAR, Washington, D. C.: 84 plants from Mount Hamilton, D. C. (136985); 80 plants from France (137450).
- TIMBERLAKE, P. H., Riverside, Calif.: 30 Hymenoptera (135362, exchange).
- TISSOT, A. N. (See under University of Florida.)
- TOLEDO SCALE Co., Toledo, Ohio: 1 public health person weighing scale, with measuring rod (138336).
- TOLMAN, R. P., Washington, D. C.: Hand-woven linen and wool overshot coverlet material (136958, loan).
- TORONTO, UNIVERSITY OF, Toronto, Ontario: (Through Dr. T. M. C. Taylor) 61 plants from Ontario (135115, exchange).
- TORREALBA, Dr. J. F., Zaraza, Venezuela: 11 insects (136320).
- TOWNES, C. H., Greenville, S. C.: 2 mollusks, a block of wood containing shipworms, 9 crabs, and 3 parasitic isopods (135076).
- TOWNSEND, L. D., Seattle, Wash.: 1 bat from Kodiak Island (137735); 33 flies and about 15 amphipods (137897).
- TOWNSEND, Mrs. W. W., Washington, D. C.: A homespun cotton counterpane, linen lined, with grape and Greek key designs in "stuffed work" and French knots, worked about 1813 by Mary Cushing of Hingham, Mass., grandmother of lender (138634, loan).
- TRAIN, PERCY, Sheaville, Oreg.: 291 plants from Oregon, Idaho, and Nevada (135084, 135213, 135832, 136206, 139506).



## TREASURY, U. S. DEPARTMENT OF THE:

*Bureau of the Mint*: United States bronze, nickel, and silver coins struck at the Denver, Philadelphia, and San Francisco mints in 1935, 34 specimens (138595).

*Coast Guard*: 2 charts and 2 bottom samples (136678).

*Public Health Service*: 3 deer mice and 1 house mouse (136874); 1 wood rat from Mobile, Ala. (137218); 2 mice from Daleville, Ala. (137913); 20,000 vials of ectoparasites (139180); (through Mrs. M. O. Nolan) 1 rice rat, 1 cotton rat, and 5 deer mice (137758); (through Dr. R. R. Parker) 2 ticks (138000); (through Dr. C. B. Philip) 14 flies (135833, 137126, 139337).

TREMOLERAS, ALBERTO, Montevideo, Uruguay: 3 crayfishes, 6 munida, 5 crabs, 25 isopods, 6 shrimps, and 15 aegleas (134870, 138477).

TRESSLER, Dr. W. L., Buffalo, N. Y.: 17 slides of ostracods, types of 16 new species (1 of them also a new genus) (139464).

TROXEL, E. R., Washington, D. C.: 1 lot of projectile points found near Jonestown, Pa., and 1 celt, locality unknown (136664).

TRUCCO, MANUEL. (See under Chilean Department of Mines and Petroleum.)

TURNER, A. L., Twin Falls, Idaho: 2 geodes from Twin Falls (138522).

TURNER, C. D., Athens, Ga.: 3 bats (137155, 137723).

TURNER, Dr. C. L., Evanston, Ill.: 57 lots (about 220 specimens) of crayfishes, forming basis of paper on genus *Cambarus* by Dr. Turner (134717).

ULKE, Dr. TITUS, Washington, D. C.: 15 amphipods from Double Top Mountain, near Syria, Va., 7 amphipods, 1 hippa, 1 hermit crab, 3 isopods from Cape May, N. J. (135959); 1 plant from Virginia (139566).

ULRICH, Dr. E. O. (See under E. Vaupel.)

UNDERWOOD, C. F., Tegucigalpa, Honduras: 88 birds from Honduras (137998, exchange).

UNION OF SOUTH AFRICA, *Department of Agriculture*, Pretoria, South Africa: 78 plants from South Africa (137369, exchange).

UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass.: A fuel-oil injection pump for a 4-cylinder Diesel engine with one nozzle and nozzle holder, sectionally cut and mounted on a demonstrating stand (135324).

UNITED STATES PHARMACOPOEIAL CONVENTION, INC., Philadelphia, Pa.:

(Through Dr. E. F. Cook) Official copy 126036 of the Pharmacopoeia of the United States of America, Eleventh Decennial Revision, for the exhibit illustrating history of United States medical standards (138466).

UNIVERSITETETS BOTANISKA TRADGÅRD, Uppsala, Sweden: 250 plants from Sweden (139441, exchange).

UNIVERSITETETS ZOOLOGISKE MUSEUM, Copenhagen, Denmark: (Through Dr. K. Stephensen) 1 isopod (137187, exchange).

USINGER, R. L. (See under Bernice P. Bishop Museum.)

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: 40 insects (134876, 136712); 47 plants from Western United States (137146, exchange); (through G. F. Knowlton) 28 miscellaneous insects from Utah (134703, 136665); slide of paratype of a new species of *Aphia* described by Mr. Knowlton (135573).

VALENTINE, Dr. J. M., Chapel Hill, N. C.: 2 beetles (types of 2 species) (135874, exchange); 4 beetles (3 species) (138464).

VALERIO, MANUEL, San José, Costa Rica: 40 insects and a small collection of mollusks from Costa Rica (135571); 2 leeches, 5 amphipods, 1 fungus, 3 insects, and a small collection of mollusks from Costa Rica (135914); 18 plants, 3 fishes, and 1 crustacean from Costa Rica (139229); 7 plants from Costa Rica (139530).

VAN DUZEE, E. P. (See under California Academy of Sciences.)

VAN EMDEN, Dr. FRITZ, Dresden, Germany: 31 coleopterous larvae, representing 12 named species, all of which are new to the collection (136113).

VAN HYNING, Dr. T., Gainesville, Fla.: 4 isopods and 3 caddisfly cases (135926).

VAN ORSTRAND, C. E., Washington, D. C.: Stone ax from Sunny Slope Farm, 3 miles north of Parkland, Tazewell County, Ill. (137359).

VAN SANT, R. M. (See under Baltimore & Ohio Railroad Co.)

VASSAR COLLEGE, Poughkeepsie, N. Y.: 61 Carboniferous and Mesozoic brachiopods (136346, exchange).

VAUGHAN, Dr. T. W., La Jolla, Calif.: Collection of Cretaceous Bryozoa from Royan, France (135137); 1 cluster of fossil annelid tubes from Pleistocene of California (137376).

VAUPEL, E., Cincinnati, Ohio: (Through Dr. E. O. Ulrich) 17 Silurian brachiopods (136100).

VEATCH, Dr. E. P., Baltimore, Md.: 24 insects from Africa (124118); 70

- miscellaneous insects, 2 mermithids, 1 roof rat, and 8 reptiles and amphibians (136959).
- VENDITTI, A. M., Washington, D. C.: 1 no. 3-B Quick Focus kodak, model A (136278); 1 Eastman 8-by-10 roll holder, patented May 1885, containing roll of paper negative material (136655, loan).
- VIOSCA, PERCY, Jr., New Orleans, La.: 6 specimens of a new species of rock bass, including the holotype (136352).
- VOLUPTÉ, Inc., Elizabeth, N. J.: 1 birds-eye maple vanity case and 1 oriental wood cigarette case illustrating interesting uses of Flexwood (136271).
- VONSEN, M., Petaluma, Calif.: 17 saline minerals from Searles Lake, Calif. (136911, exchange); 5 mineral specimens from California (139655, exchange).
- WAGNER, W. H., Washington, D. C.: 4 mounted specimens of Lepidoptera from Terra Cotta, D. C. (135129); 3 butterflies (135709).
- WALCAVITCH, W. W., Washington, D. C.: 1 sea-robin (139307).
- WALCOTT, Mrs. C. D., Washington, D. C.: 1 cloth bag embroidered with porcelain and glass beads, Cree (136756); necklace of shell and turquoise beads (136908); Navaho blanket (137067); 14 plants from United States (137085); ancient ivory pail or box handle from the Diomed Islands, Bering Strait, Alaska (137455). (See also under Mrs. L. F. Hobart.)
- WALKER, E. H., Washington, D. C.: 28 plants from Mount Katahdin, Maine (136487).
- WALKER, E. P., Washington, D. C.: 1 pocket mouse from Oceanside, Calif. (137151).
- WALKER, R. S., Chattanooga, Tenn.: 1 spider and egg sac (135347).
- WALLEY, G. STUART. (See under Canadian Department of Agriculture.)
- WALSH, P. P., Washington, D. C.: 1 4-by-5 Blair camera made by Eastman as successor to Blair Camera Co. (136291).
- WALTHER, ERIC, San Francisco, Calif.: Photograph of cultivated plant from Veracruz (137446).
- WAR, U. S. DEPARTMENT OF, *Office of the Quartermaster General*, Washington, D. C.: Musical instruments captured from the Eighth Jaeger German Mounted Band on the western front during the World War (136683).
- WARD'S NATURAL SCIENCE ESTABLISHMENT, Rochester, N. Y.: 50 Paleozoic brachiopods and cephalopods (14 species) (137117, exchange).
- WARTHIN, Prof. A. S., Poughkeepsie, N. Y.: 1 type specimen of a fossil cephalopod (138596). (See also under Smithsonian Institution, National Museum.)
- WASHINGTON, ESTATE OF Dr. HENRY S., Washington, D. C.: Archeological objects and 11 ethnological specimens (138216).
- WASHINGTON, STATE COLLEGE OF, Pullman, Wash.: 137 plants from Northwestern United States (137447, exchange); 1 photograph and 2 specimens of plants (137963, exchange).
- WASHINGTON LEICA CLUB, Washington, D. C.: 60 pictorial prints for special exhibition during July 1935 (135167, loan).
- WATKINS, W. N., Washington, D. C.: 1 wood sample each of northern white pine, witch hazel, flowering almond, and goldenbell collected by donor (139817).
- WATTERSON, IRA, Washington, D. C.: Amethyst stickpin owned by Noah Webster (139384).
- WATTISON, J. T., Senhora da Hora, Portugal: 53 Portuguese Ordovician trilobites and other invertebrate fossils (137682, exchange).
- WEBB, Mrs. T. W., Lake Placid, Fla.: 1 beetle from Florida (138932).
- WEBBER, F. S., Holyoke, Mass.: 29 mollusks from the Philippines (136284, 136979).
- WEBER, N. A., Towner, N. Dak.: 7 vials of aphids (130550).
- WEBSTER, Mrs. E. K., Washington, D. C.: Sword and scabbard owned by Maj. Gen. John W. Davidson, U. S. Volunteers, during Civil War (136111).
- WEBSTER, FRANCES M., Washington, D. C.: Sword and scabbard owned by Col. Lucien B. Webster, U. S. Army, during Mexican War (136109).
- WEEMS, Dr. M. A., East Columbia, Tex.: Small collection of insects (135085).
- WELLCOME, Sir HENRY S., London, England: Hillside plow believed to have been used in New York State about 1800 (127655).
- WELLS, T. H., Annapolis, Md.: Proximal half of humerus of a pterodactyl from Eagle Ford formation near Austin, Tex. (136153).
- WEST, LEVON, New York City: 55 etchings and drypoints for special exhibition during February 1935 (137463, loan); 1 etching entitled "Night Riders" (138642).
- WEST TEXAS HISTORICAL AND SCIENTIFIC SOCIETY, Alpine, Tex.: 2 skulls from near Canyon, Tex. (138945).
- WEST VIRGINIA BIOLOGICAL SURVEY, Morgantown, W. Va.: 245 shells from West Virginia (135909).



- WESTERMAN, B., Co., Inc., New York City: 1 daguerreotype camera, an original no. 6 (137775, loan).
- WESTERN UNION TELEGRAPH Co., New York City: A Vibroplex telegraph key, an example of the vibrating pendulum type of sending instrument known as the telegrapher's "bug" (136987).
- WETMORE, Dr. ALEXANDER, Washington, D. C.: 1 whippoorwill (135125); 2 yellow-breasted chats, 1 robin (135274); 1 set of 7 eggs of short-billed marsh wren (135278); quartzite pebble used as a hammerstone, found near Willard, Utah (135875); 11 birds (135916, 136658, 136633, 136702, 139525); 4 flyingfishes (2 genera) from off the coast of Oahu, Hawaii (137413); various anatomical parts of birds in alcohol (137466); 2 bird skins and 3 skeletons (139237); 1 soft-shelled turtle from Sevenmile Ford, Holston River, Va. (139805).
- WHARTON, G. W., Jr. (See under U. S. Department of Commerce, Bureau of Fisheries.)
- WHERY, Dr. E. T., Philadelphia, Pa.: 1 fern from Pennsylvania (138512).
- WHITE, Mrs. E. C., Washington, D. C.: 62 plants from New Hampshire (136272).
- WHITEHEAD, JACK, Superior, Ariz.: 6 ferns from Arizona and Mexico (136977).
- WHITES, D. B., Louisville, Miss.: (Through Dr. C. E. Burt) 8 reptiles and amphibians from near Louisville, Miss. (136196).
- WHITESIDE, R. M., Tulsa, Okla.: (Through Dr. Josiah Bridge) 1 exhibition specimen of Pennsylvanian sandstone from Oklahoma, containing starlike impressions (139243).
- WHITING, A. F., Flagstaff, Ariz.: 27 plants from Arizona (135953).
- WHITLOCK, Mrs. BRAND, Cannes, France: Badges, decorations, documents, medals, plaques, and other mementos of the career of Brand Whitlock, U. S. Minister and Ambassador to Belgium during World War period (137815).
- WHITNALL, Prof. H. O. (See under Colgate University.)
- WHITNEY, C. M. (See under Mrs. May W. Helms.)
- WILCZEK, Prof. E. (See under Université de Lausanne.)
- WILES, G. L., Stratford, N. C.: (Through George Stose) 2 gahnite crystals from Stratford (138639).
- WILHELM, L. C., Easton, Pa.: Small wooden brace, without brass plates on angles, and an old spoon bit, both dating from about 1828 (135006).
- WILKENS, HANS, Reading, Pa.: 1 plant from Tennessee (136273, exchange).
- WILLE, Dr. J. (See under Estacion Experimental Agricola de la Molina.)
- WILLIAMS, Mrs. BELLE, Washington, D. C.: 1 cardinal (137217).
- WILLIAMS, JESSE, Benton, Ill., and Dr. J. P. E. MORRISON, Washington, D. C.: 1,000 hippos from Ocean City, Md. (135822).
- WILLIAMS, RAYMOND, Roscommon, Mich.: 1 tapeworm (135086).
- WILLIAMS COLLEGE, Williamstown, Mass.: (Through E. L. Perry) 6 fossil echinoids, including types of 3 species (138461, deposit).
- WILLIG, EUGENIA C., Baltimore, Md.: Austrian military officer's sword and spurs of latter part of 18th century owned by George Willig (138723).
- WILSON, B. S., Tucson, Ariz.: (Through F. L. Hess) 2 specimens of cupro-tungstite from Fuerte, Sinaloa, Mexico (138206).
- WILSON, Dr. C. B., Westfield, Mass.: 123 vials containing about 600 copepods and 30 isopods (136626).
- WILSON, Capt. H. L., Washington, D. C.: (Through Mrs. Beatrice W. Baker) Miniature hand-carved chair made in 1836 near Richmond, Ind. (138716).
- WINDSOR, A. S. (See under General Biological Supply House.)
- WINSTON, HARRY, New York City: Replica of the Jonker diamond (138492).
- WINSTON, SAMUEL, Arlington, Va.: 1 ring-necked snake from Cherrydale, Va. (139815).
- WINTHROP CHEMICAL Co., Inc., New York City: 4-ounce specimens of chiniofon, merbaphen, and phenacaine hydrochloride, new medicines of the Pharmacopoeia of the United States, 11th Decennial Revision, official from June 1, 1936 (139522).
- WISE, FRANCIS, Baltimore, Md.: 3 specimens of laumontite and 1 of calcite from a quarry in Baltimore, Md. (135171).
- WITHERSPOON, Mrs. T. A., Washington, D. C.: Turkish dagger and sheath (136935).
- WOLCOTT, Dr. G. N., St. Augustine, Trinidad, British West Indies: 55 insects (137417, 138757).
- WOODBURY, ROBERT, Yonkers, N. Y.: 3 spiders (135364).
- WOOLUMS, C. W., San Diego, Calif.: Bone object of unknown use from Kiska Island, Aleutian Islands, Alaska (137456).
- WORLEY, C. L., Placerville, Idaho: 1 plant from Idaho (139672).
- WORMSER, MORITZ. (See under American Numismatic Association.)

- WORTLEY, Mrs. R. S., Washington, D. C.: Medals, badges, jewelry, swords, silverware, statuettes, and illuminated documents presented to Rear Admiral Winfield Scott Schley, U. S. Navy, in recognition of his naval achievements, and uniforms and miscellaneous naval relics owned by him (136891).
- WRIGHT, JAMES, Washington, D. C.: 1 specimen of bank-note engraving (137761).
- WRIGHT, L. M., San Diego, Calif.: Fossil fishes and leaves from Modelo formation near Los Angeles, Calif., and 1 fossil barnacle (137402).
- WRIGHT, R. S., New York City: 50 etchings and drypoints for special exhibition during November 1935 (136654, loan); (through the Klee-mann Galleries) 2 drypoint etchings, "Quay Freighters, Antibes", and "Tranquillity" (136999).
- WYATT, A. K., Chicago, Ill.: 19 moths—10 adults (3 species) and 9 larvae (3 species) (137170).
- WYMAN, MERLE R., Fitzgerald, Ga.: Old American fife and a flute (137059).
- YALE UNIVERSITY, New Haven, Conn.: (through Prof. S. J. Record) 1 wood sample of "angelim rajado", from Brazil (137034, exchange).  
*School of Forestry*: (Through Prof. S. J. Record) 14 plants from Ecuador, collected by Rimbach (138510, exchange); 1 sample each of Santo Domingo and Spanish Honduras rosewood (138649, exchange).  
*School of Medicine*: (Through Dr. J. F. Fulton) 1 marmoset (136614).
- YAO, Dr. Y. T., Nanking, China: 73 shells from Chekiang, Kiangsu, and Anhwei Provinces, China (138208).
- YINGST, A. CYRUS, Washington, D. C.: Clarinet bought in 1850 by donor's father, Cyrus Yingst (135713).
- YOUNG, MAHONRI, New York City: (Through C. W. Kraushaar Galleries) 51 etchings and drypoints for special exhibition (136989, loan).
- YOUNGSTOWN ARC ENGRAVING Co., Youngstown, Ohio: (Through F. E. Hubler) 2 photostat copies of the Youngstown Daily Vindicator, December 26, 1893, containing a print made from a stereotype that was made from a halftone and run on a Perfecting rotary press (137458).
- YU, Dr. S. C. (See under Fan Memorial Institute of Biology.)
- ZEIGLER, J. M., St. Augustine, Fla.: 1 moth from Florida (135088).
- ZETEK, JAMES, Balboa, Canal Zone: 25 isopods (136646, exchange).
- ZIRKLE, W. F., Washington, D. C.: 3 wasps (135827).
- ZOOLOGICAL SOCIETY OF SAN DIEGO, San Diego, Calif.: (Through Dr. C. R. Schroeder) Skull and urogenital tract of a male Galapagos fur seal from Tower Island, Galapagos Islands (135943); skull and skin and urogenital tract of a Galapagos fur seal from Tower Island (136663); skins of 2 Galapagos fur seals (137755).
- ZOOLOGICAL SURVEY OF INDIA, Calcutta, India: (Through Dr. S. L. Hora) A specimen of a remarkable new family of fishes from Burma (135122, exchange).
- ZOOLOGISCHES MUSEUM DER UNIVERSITÄT, Berlin, Germany: 1 ringed plover (136700).



PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM  
DURING THE FISCAL YEAR 1935-36

REPORT

Report on the progress and condition of the United States National Museum  
for the year ended June 30, 1935. 8vo, iii+121 pp.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 26, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 8. New species of *Pilea* from the Andes. By E. P. Killip. Pp. i-viii,  
367-394.

FROM VOLUME 83 OF THE PROCEEDINGS

- No. 2979. New West Indian cerambycid beetles. By W. S. Fisher. Pp. 189-210.  
No. 2980. Two new species of tapeworms from carnivores and a redescription  
of *Taenia laticollis* Rudolphi, 1819. By Mary Scott Skinner. Pp. 211-220,  
pls. 19-21.  
No. 2981. New Paleocene mammals from the Fort Union of Montana. By George  
Gaylord Simpson. Pp. 221-244.  
No. 2982. Five new genera and two new species of unstalked crinoids. By  
A. H. Clark. Pp. 245-250.  
No. 2983. Notes on the butterflies of the genus *Enodia* and description of a  
new fritillary from Peru. By A. H. Clark. Pp. 251-259, pl. 22.  
No. 2984. Polychaetous annelids from Amoy, China. By Aaron L. Treadwell.  
Pp. 261-279, figs. 18-20.  
No. 2985. A study of the fossil horse remains from the Upper Pliocene of  
Idaho. By C. Lewis Gazin. Pp. 281-320, figs. 21-24, pls. 23-33.  
No. 2986. A new genus and species of trematode from the little brown bat  
and a key to the genera of Pleurogenetinae. By Ralph W. Macy. Pp.  
321-324, fig. 25.  
No. 2987. Two new cottid fishes from the western Pacific, with a revision of  
the genus *Stlengis* Jordan and Starks. By Rolf L. Bolin. Pp. 325-334,  
figs. 26-27, pl. 34.  
No. 2988. Tertiary plants from Venezuela. By Edward W. Berry. Pp. 335-360,  
figs. 28-31.  
No. 2989. Three new millipeds of the order Colobognatha from Tennessee, Texas,  
and Lower California, with records of previously known species. By H. F.  
Loomis. Pp. 361-368, fig. 32.















SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01583 1241